

TEO-540-C1A Engine Illustrated Parts Catalog

May 2026

| PC-TEO-540-C1A Rev. 7



652 Oliver Street
Williamsport, PA 17701

TEO-540-C1A Engine Illustrated Parts Catalog

Lycoming Part Number: PC-TEO-540-C1A Rev. 7

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Record of Revisions

NOTICE: Service Documents with a later release date than this parts catalog override parts information in this document.

| Rev No. | Revision Changes | Issue Date |
|---------|---|--------------|
| New | Initial Release | January 2019 |
| Rev. 1 | <p>Chapter 72-30</p> <ul style="list-style-type: none"> • Revised Figure 9 to add Fuel Injector O-Rings and Fuel Injector Retainer • Revised parts list for Figure 9 to add item 12, P/N 06C29094-CT Fuel Injector O-Ring Kit and item 13, P/N 03A29095-CT Fuel Injector Retainer <p>Chapter 72-50</p> <ul style="list-style-type: none"> • Revised the parts list for Figure 17 - Changed P/N LW-16783-12 to LW-16783-32 • Revised Figure 18 to indicate 4 - LW-25-1.25 and 6 - LW-25-1.00 will be installed in the induction housing instead of 10 – LW-25-1.00 bolts and added a NOTE to show the installation location of the four LW-25-1.25 bolts • Revised the parts list for Figure 18: <ul style="list-style-type: none"> ○ Changed the quantity of item 11, P/N 1102 from 3 to 4 ○ Changed the quantity of item 29, P/N LW-25-1.00 from 10 to 6 ○ Added a new item 30, P/N LW-25-1.25 with a quantity of 4 ○ Added a NOTE to indicate installation location of the four LW-25-1.25 bolts <p>Chapter 72-60</p> <ul style="list-style-type: none"> • Revised Figure 19 to add item 18, O-Ring P/N AS3209-151 • Revised parts list for Figure 19 to add item 18, P/N O-Ring P/N AS3209-151 <p>Chapter 73-10</p> <ul style="list-style-type: none"> • Revised Figure 25 to indicate correct installation of items 18 and 19, Fuel injector fire sleeves • Revised the parts list for Figure 25: <ul style="list-style-type: none"> ○ Added additional explanation for installation of items 18 and 19, Fuel injector fire sleeves ○ Changed the part number for item 22, Fuel regulator adapter manifold assembly from 02K26300 to 02K29101 <p>Chapter 73-20</p> <ul style="list-style-type: none"> • Revised Figure 26 to show new sensor assembly with lead an connector • Revised the parts list for Figure 26: <ul style="list-style-type: none"> ○ Changed the part number for item 1, Regulator assembly from 02K26300 to 02K29101 ○ Changed the part number for item 6, Sensor from 60E26311-CT to 60E29080 | May 2019 |

| Rev No. | Revision Changes | Issue Date |
|-------------------|--|------------|
| Rev. 1 (Cont.) | <p>Chapter 74-20</p> <ul style="list-style-type: none"> • Revised the parts list for Figure 27: <ul style="list-style-type: none"> ○ Changed the part number for item 6, Sensor from 60E26311-CT to 60E29080 ○ Changed the part number for item 7, Sensor from 60E26312-CT to 60E29081 ○ Changed the part number for item 9, Sensor from 60E26661-CT to 60E29082 • Revised the parts list for Figure 29, changed ECU Assembly P/N from 60B29098 to 60B29156 • Revised Figures 30A and 30B to indicate change to item 1, Wiring Harness • Revised the parts list for Figures 30A and 30B: <ul style="list-style-type: none"> ○ Changed the part number for item 1, Wiring Harness from 60A28332 to 60A29063 ○ Deleted item 24, LW-16266-10-19 <p>Chapter 80-10</p> <ul style="list-style-type: none"> • Revised Figure 33 to show the engine in a normal, upright position | May 2019 |
| Rev. 2 | <p>Chapter 72-20</p> <ul style="list-style-type: none"> • Corrected the descriptions of items 21 and 22 in the parts list for Figure 5 to indicate the camshaft was for use with flat tappets <p>Chapter 72-30</p> <ul style="list-style-type: none"> • Revised Figure 9 to show stud P/N 31C-13, insert P/N 69260 and identify stud P/N 25C-8 • Revised the parts list for Figure 9 to add part number 16A30200-01 as an approved alternate to item 1 and added items 5, 6, and 7 and renumbered remaining items in list • Revised Figure 10 to indicate correct position of item 18, Washer P/N 66728 <p>Chapter 72-40</p> <ul style="list-style-type: none"> • Revised Figure 13 to show a single V-Band Coupling P/N LW-12093-6 as the coupling to attach the tailpipe to the wastegate exit • Changed the part number for item 1 in the parts list for Figure 13 from 07E28327 to 07E29522 • Changed the quantity for item 25 from 2 to 1 in the parts list for Figure 13 • Revised the footnote regarding item 25, the V-Band Coupling P/N LW-12093-6 in the parts list for Figure 13 • Revised Figure 14 to show the solenoid o-rings • Changed the part number for item 19 from 03D28330 to 03D29691 in the parts list for Figure 15 • Revised Figure 16 to indicate availability of sensor, transducer, hose, and clamps • Revised the parts list for Figure 16 to add items 7 thru 10 - sensor, transducer, hose, and clamps <p>Chapter 72-50</p> <ul style="list-style-type: none"> • Revised the part number for item 4 – Oil Level Gage Assembly | June 2021 |

| Rev No. | Revision Changes | Issue Date |
|-------------------|---|-------------|
| Rev. 2 (Cont.) | <p>Chapter 72-60</p> <ul style="list-style-type: none"> • Revised Figure 21 to indicate an item number for the fuel filter O-Ring • Revised the parts list for Figure 21, adding a new item number 9 and renumbering the remainder of the list <p>Chapter 73-10</p> <ul style="list-style-type: none"> • Revised the part number for item 6 to LW-25-0.63 • Added new Fuel Injector P/N 61X29461-CT as an approved alternate for P/N 61X26294-CT • Added a footnote for instructions when replacing Fuel Injector P/N 61X26294-CT with P/N 61X29461-CT <p>Chapter 74-20</p> <ul style="list-style-type: none"> • Revised the parts list for Figure 27: <ul style="list-style-type: none"> ○ Changed the P/N for the Fuel Pressure Sensor from 60E29080 to 60E29660 ○ Changed the P/N for the Oil Pressure Sensor from 60E29081 to 60E29661 ○ Changed the P/N for the Air Pressure Sensor from 60E29082 to 60E29662 • Revised the parts list for Figure 29: <ul style="list-style-type: none"> ○ Changed ECU Assembly P/N from 60B29156 to 60B29438 ○ Added a new ECU Assembly P/N 60B29659 ○ Added a footnote for application of the two different ECU Assembly part numbers • Revised the Quantity of items 51 and 52 in the parts list for Figure 30A, B • Added new P/N 1182-Q4 for Spark Plugs in the parts list for Figure 30A, B • Revised the parts list for Figure 31, added a new alternator assembly for optional 3.65:1 drive ratio <p>Service Kit Section</p> <ul style="list-style-type: none"> • Added P/N 16A30200-0101 as an approved alternate to P/N 16G26682-01 for the Cylinder, Piston, and Ring Assembly Kit P/N 05K26774 | June 2021 |
| Rev. 3 | <p>Information Page (back of Title Page)</p> <ul style="list-style-type: none"> • Revised the contact information for Product Support <p>Introduction</p> <ul style="list-style-type: none"> • Revised the CAUTION at the beginning of the chapter • Revised the How to Order Parts section <p>Chapter 24-30</p> <ul style="list-style-type: none"> • Revised Figure 1 to indicate more accurate representation of alternator bracket configuration • Moved Alternator Assembly and Belts from Chapter 74-20 to Chapter 24-30 and renumbered subsequent figures accordingly | August 2021 |

| Rev No. | Revision Changes | Issue Date |
|-------------------|--|------------------|
| Rev. 3 (Cont.) | <p>Chapter 72-20</p> <ul style="list-style-type: none"> Revised the footnote regarding oil pressure relief valve spring selection in the parts list for Figure 5 <p>Chapter 72-30</p> <ul style="list-style-type: none"> Revised the parts list for Figure 10 to change the P/N for item 13 – Fuel Injector Adapter from 02E26267 to 02E29797 <p>Chapter 72-40</p> <ul style="list-style-type: none"> Revised Figure 15 to add O-rings P/N MS29512-04 and MS29512-06 and adjusted item numbering to account for added parts Revised the parts list for Figure 15: <ul style="list-style-type: none"> Added a new Solenoid Valve P/N 02L29677 Added O-rings P/N MS29512-04 and MS29512-06 and adjusted parts list item numbering to account for added parts Added a footnote for application of the two different Solenoid Valve part numbers <p>Chapter 72-60</p> <ul style="list-style-type: none"> Revised Figure 20 excluding the Permanent Magnet Alternator Revised the parts list for Figure 20 excluding the Permanent Magnet Alternator, fastening hardware, and PMA O-ring <p>Chapter 73-10</p> <ul style="list-style-type: none"> Revised the parts list for Figure 26 to change the P/N for item 1 – Fuel Injector Adapter from 02E26267 to 02E29797 <p>Chapter 74-20</p> <ul style="list-style-type: none"> Added new Figure 32 and parts list for Permanent Magnet Alternator <p>Service Kit Section</p> <ul style="list-style-type: none"> Revised the parts list for the Cylinder, Piston and Ring Assembly to change the P/N for the Fuel Injector Adapter from 02E26267 to 02E29797 | August 2021 |
| Rev. 4 | <p>Chapter 24-30</p> <ul style="list-style-type: none"> Added the HET P/N to the description for the alternator, Lycoming P/N 32C28550, in the parts list for Figure 2 <p>Chapter 72-30</p> <ul style="list-style-type: none"> Revised Figure 10 and the parts list for Figure 10 to indicate fuel injector differences Added part number LW-15592-5-04 to the parts list for Figure 12 Added new footnote to the parts list for Figure 12 <p>Chapter 72-40</p> <ul style="list-style-type: none"> Revised Figure 16 to show more detail for item 4 and reverse the numerical identifiers for items 4 and 5 <p>Chapter 72-50</p> <ul style="list-style-type: none"> Changed the P/N for item 4 in the parts list for Figure 18 from LW-16783-33 to LW-16783-34 | November 2021 |

| Rev No. | Revision Changes | Issue Date |
|-------------------|--|------------------|
| Rev. 4 (Cont.) | <p>Chapter 72-60</p> <ul style="list-style-type: none"> • Changed the part number for item 6 in the parts list for Figure 24 from 53E22144 to 53E29909 <p>Chapter 73-10</p> <ul style="list-style-type: none"> • Revised the parts list for Figure 25: <ul style="list-style-type: none"> ○ Changed the part number for item 18 from 01M26558 to 01M29868 ○ Changed the part number for item 19 from 01M26622 to 01M29869 • Revised the parts list for Figure 26: <ul style="list-style-type: none"> ○ Changed the part number for item 17 from 01M26558 to 01M29868 ○ Changed the part number for item 18 from 01M26622 to 01M29869 <p>Chapter 74-20</p> <ul style="list-style-type: none"> • Added a new ECU Assembly P/N 60B29726 to the parts list for Figure 30 • Added alternate DLU P/N 60B29462 to the parts list for Figure 30 | November 2021 |
| Rev. 5 | <p>Chapter 24-30</p> <ul style="list-style-type: none"> • Revised the Description for alternator belt part number 37C28529-985 • Added new alternator belt part number 37C28529-955 for use with pulley P/N 36B29585 <p>Chapter 72-30</p> <ul style="list-style-type: none"> • Revised the part number for item 9, Piston Ring, in the parts list for Figure 9 • Revised the part number for item 11, knock sensor, in the parts list for Figure 10 • Revised the part number for item 18, Fuel Injector from 61X26294-CT to 61X29461-CT, in the parts list for Figure 10 • Revised the part numbers for items 3 and 4, valve springs, in the parts list for Figure 11 <p>Chapter 72-40</p> <ul style="list-style-type: none"> • Revised Figure 13 • Changed the part number for item 24, Exhaust Bypass Valve, from LW-12778 to 47E29907 in the parts list for Figure 14 • Revised Figure 15 • Changed the quantity for O-ring P/N MS29512-04 from 1 to 2 in the parts list for Figure 15 • Changed the part number for item 4, clamp, from LW-15570 to 07C29900 in the parts list for Figure 16 <p>Chapter 72-60</p> <ul style="list-style-type: none"> • Added a new Oil Pump Body Assembly P/N 51A29876 to the parts list for Figure 21 • Changed the part number for item 5, oil filter, from LW-13215 to LW-13216 in the parts list for Figure 25 • Added part number 53E22144 as an alternate for item 6 in the parts list for Figure 25 • Added a footnote to the parts list for Figure 25 to reference SI 1585 | July 2023 |

| Rev No. | Revision Changes | Issue Date |
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| Rev. 5 (cont.) | <p>Chap1ter 73-20</p> <ul style="list-style-type: none"> Revised Figure 27 to add 3 O Rings Revised parts list for Figure 27 to add 3 O Rings Changed the part number for item 7, Fuel pressure sensor, from 60E29080 to 60E29660 in the parts list for Figure 27 <p>Chapter 74-20</p> <ul style="list-style-type: none"> Revised Figure 28 to indicate new item 9, O-ring and renumbered subsequent items Revised the part numbers for items 3 and 4, sensor, in the parts list for Figure 28 Revised the parts list for Figure 28 to add new item 9, O-ring P/N AS3209-017 and renumbered subsequent items Revised Figure 30 to add new item 4 Revised the part number for item 1, from 60B29438 to 60B29705, in the parts list for Figure 30 Changed the descriptions of both DLU Assemblies, item 3, in the parts list for Figure 30 Added new item 4 to the parts list for Figure 30 <p>Service Kit Section</p> <ul style="list-style-type: none"> Deleted items from Seal and Gasket Set Parts List Changed item number 14H21990 to 14H29889 in the Cylinder, Piston, and Ring Assembly parts list Deleted 02E29797 from the Cylinder, Piston, and Ring Assembly parts list | July 2023 |
| Rev. 6 | <p>Oversize and Undersize Parts</p> <ul style="list-style-type: none"> Corrected P/N for the spark plug insert <p>Chapter 72-40</p> <ul style="list-style-type: none"> Added approved alternate intake pipe part numbers for items 2, 3, 4, 5, and 6 in the parts list for Figure 13 Updated the part number for item 24, exhaust bypass valve, in the parts list for Figure 14 Added a footnote to reference S.I. 1589 in the parts list for Figure 14 Revised Figure 17 to indicate screw and washer added to parts list and revised the item numbers Revised the parts list for Figure 17 to revise the throttle position sensor part number, add new items 8 and 9, and renumbered subsequent item numbers <p>Chapter 72-60</p> <ul style="list-style-type: none"> Revised Figure 20 adding the INSERT - STD-1173 Revised the parts list for Figure 20 adding item 14, INSERT - STD-1173 Added a footnote to the parts list for Figure 25 to reference SI 1585 Revised Figure 25 to indicate gasket and renumbered subsequent items, and added gasket to parts list <p>Chapter 74-20</p> <ul style="list-style-type: none"> Revised Figure 28 to add additional parts for the remote fuel pressure sensor Revised the parts list for Figure 28 to add additional parts (items 20 through 27) for the remote fuel pressure sensor | January 2025 |

| Rev No. | Revision Changes | Issue Date |
|---------|--|-----------------|
| Rev. 6 | <p>Chapter 74-20 (Cont.)</p> <ul style="list-style-type: none"> • Added new approved alternate part number for items 12 and 61 in the parts list for Figure 31, A, B • Revised the description for item 67, Spark Plugs, in the parts list for Figure 31, A, B • Added footnote to reference SI 1042 to the parts list for Figure 31, A, B <p>Chapter 78-00</p> <ul style="list-style-type: none"> • Added a superseding part number for the Turbocharger Transition, Item 15 and a footnote to the parts list for Figure 33 <p>Service Kit Section</p> <ul style="list-style-type: none"> • Added listings for Single Cylinder Seal and Gasket Kit and Piston Ring Kit | January 2025 |
| Rev. 7 | <p>Chapter 72-20</p> <ul style="list-style-type: none"> • Revised Figure 8 • Revised the parts list for Figure 8 to change the quantity of Item 1, and new Item 2, and renumber all subsequent items in the parts list <p>Chapter 72-40</p> <ul style="list-style-type: none"> • Deleted part numbers LW-12191, LW-12192, LW-12193, LW-12194, and LW-12195 from the parts list for Figure 13 • Replaced P/N LW-16562 with P/N 75739-CT in the parts list for Figure 15 • Replaced P/N 72376 with P/N 72376-CT in the parts list for Figure 15 • Replaced P/N 60D26319-CT with P/N 60D29906-CT in the parts list for Figure 17 <p>Chapter 73-10</p> <ul style="list-style-type: none"> • Revised Figure 26 • Parts list for Figure 26 <ul style="list-style-type: none"> ○ Revised the part numbers for Items 25 and 42 ○ Revised the quantities for items 27, 35, and 36 ○ Added new items 43, 44, and 45 in the <p>Chapter 73-20</p> <ul style="list-style-type: none"> • Changed the part number for Item 2 in the parts list for Figure 27 from 63K26299-CT to 60K29867-CT • Added and approved alternate part number and footnote for Item 6 in the parts list for Figure 27 <p>Chapter 74-20</p> <ul style="list-style-type: none"> • Revised Figure 28 to indicate O-ring for temperature sensor • Added part number for the O-ring for the temperature sensor to the parts list for Figure 28 and renumbered subsequent item numbers • Revised the part number for Item 19 in the parts list for Figure 28 <p>Chapter 78-00</p> <ul style="list-style-type: none"> • Removed Items 16 and 17, Heat shield and Clamps, from Figure 33 and the parts list for Figure 33 | May 2026 |

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Units per Assembly Column

Where more than one assembly exists, this column contains the quantity of a specific part required in the build sequence of only one next higher assembly. The letters “AR” are for “as required” applicable to bulk items or non-illustrated select-from-range-parts. The letters “RF” identify items for reference.

Lockwire, Safety Cable

To maintain as assembled torque integrity Lockwire used is to be a one continuous strand twisted to keep tension on various internal fasteners ensuring a minimum torque is retained. Lockwire installed correctly will pull in the direction of fastener assembled tension. Lycoming Engines does not recommend the use of safety cable for retention of internal engine parts or assemblies. Refer to the latest revision of **Service Instruction No. 1566**.

Vendor Accessories

Parts coverage of Vendor Accessories used on Lycoming engines may be found in the appropriate Vendor’s Parts Catalog. A list of vendor’s addresses appears in the latest revision of Lycoming Service Letter No. L114.

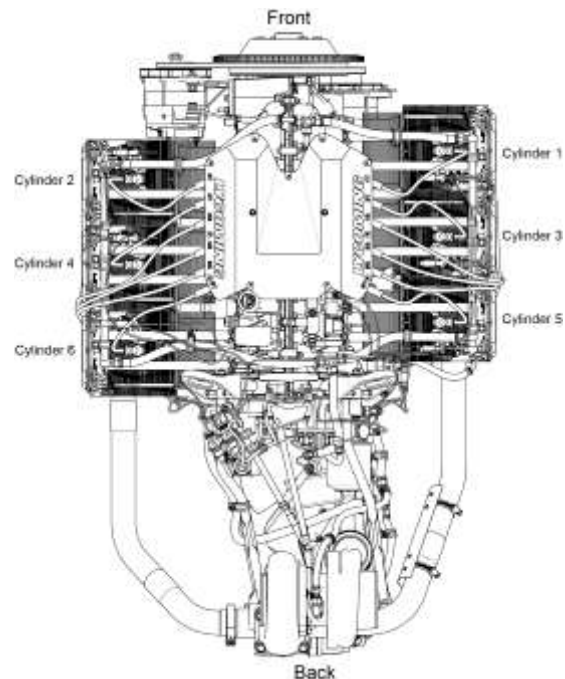
Any reference in this document to the suppliers/part manufacturer’s product, by name, trademark, part number or other description is solely for the purpose of identification and does not indicate or infer that Lycoming accepts responsibility for quality control and/or airworthiness of parts, which do not pass through the Lycoming quality control system.

Environmental Compliance

Lycoming is concerned with preserving the environment. Lycoming strongly urges engine owners and repair/overhaul personnel to observe and comply with all federal, state, and local environmental regulations when solvents, paint, fuel, oil, chemicals, or other consumables are used in operating, maintaining, or overhauling an engine component. Please share our concern for, and commitment to a clean earth, clean water, and especially clean air for succeeding generations of flyers.

Perspective of References

In this manual, all references to locations of various components will be designated as if viewing the engine from the rear (or anti-propeller) end. the front of the engine is the propeller end and the oil sump is on the bottom of the engine. Cylinders are numbered from front to rear with the odd-numbered cylinders on the right-hand side. the firing order for this engine is 1-4-5-2-3-6.



Top View of Engine

How to Order Parts

To order parts from this parts catalog, contact an Authorized Lycoming Distributor with the part number(s), nomenclature, and quantity along with the model and serial number of your engine. Authorized Lycoming Distributors will have up-to-date part number supersedure, pricing, and availability information on parts listed in this parts catalog.

An Oversize and Undersize Parts List is included in the front section of this catalog to aid in ordering parts as necessary during maintenance or overhaul.

To supply any comments, suggestions, or corrections to this parts catalog, go online to the Lycoming.com website on the internet.

NOTE:

Lycoming recommends that owners of this manual sign up for email notification on the Technical Publications page of our website <https://www.lycoming.com/contact/knowledge-base/publications>. By submitting your email address, you will receive notification whenever Lycoming publishes a new or revised technical publication, including any revisions to this parts catalog.

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Abbreviations and Acronyms

| A | |
|----------|-----------------------------|
| amp. | Ampere |
| AR | As Required |
| Assy. | Assembly |
| ATA | Air Transport Association |
| C | |
| Cyl. | Cylinder |
| F | |
| Fill. | Fillister |
| H | |
| Hex. | Hexagon |
| I | |
| I.D. | Inside Diameter |
| in. | Inch |
| IPC | Illustrated Parts Catalog |
| M | |
| mm | Millimeter |
| N | |
| No. | Number |
| NPT | National Pipe Thread |
| O | |
| O.D. | Outside Diameter |
| P | |
| P/N | Part Number |
| Q | |
| Qty. | Quantity |
| R | |
| RF | Reference |
| S | |
| SB | Service Bulletin |
| SI | Service Instruction |
| SSP | Special Service Publication |
| U | |
| UNF | Unified National Fine |

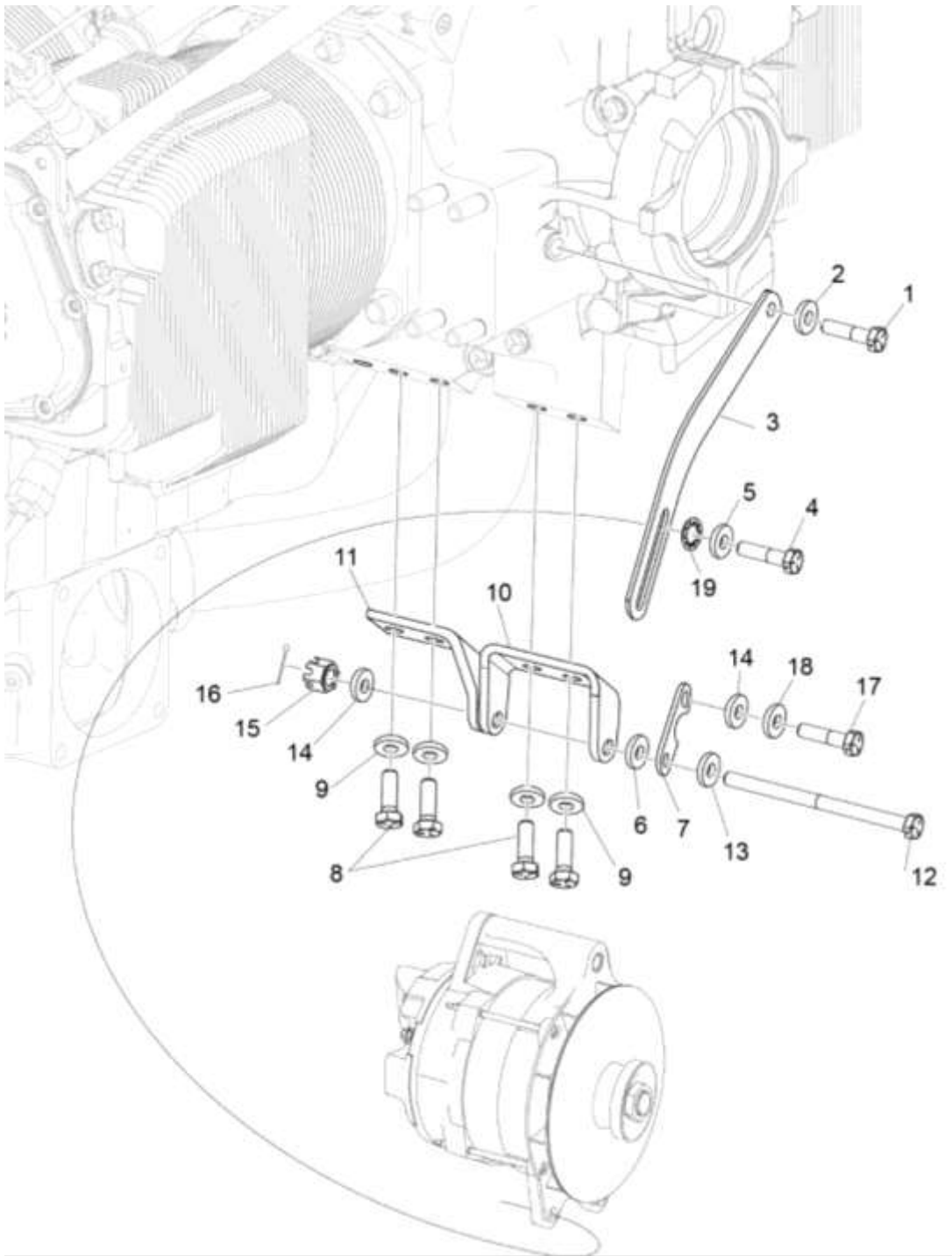
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Oversize and Undersize Parts Listing

| PART NO. | DESCRIPTION | OVERSIZE (IN.) | | | | | UNDERSIZE (IN.) | | |
|-----------|--------------------------------|----------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------|
| | | P05 .005 | P10 .010 | P20 .020 | P30 .030 | P50 .050 | M03 .003 | M06 .006 | M10 .010 |
| 18B23885 | BEARING, Front Crankshaft | | | | | | X | X | X |
| 18E23886 | BEARING, Crankshaft | | | | | | X | X | X |
| 18N26106 | BEARING, Connecting Rod | | | | | | X | X | X |
| 71903-A † | BUSHING, Counterweight Dynamic | -- | -- | -- | -- | -- | -- | -- | -- |
| 72155-S | BUSHING, Prop Flange, short | X | | | | | | | |
| 75656-S | BUSHING, Prop Flange, long | X | | | | | | | |
| 75657-S | BUSHING, Prop Flange indexing | X | | | | | | | |
| 66670 | BUSHING, Rocker Shaft | | X | | | | | | |
| STD-1065 | DOWEL, Crankshaft | | X | | | | | | |
| 69796 | DOWEL, Crankshaft bearing | X | | | | | | | |
| 75838 | GUIDE, Valve exhaust | | | | X | | | | |
| 66713 | GUIDE, Valve intake | | | | X | | | | |
| LW-15628 | SEAL, Crankshaft oil | | | | | X | | | |
| 69260 | INSERT, Spark Plug | | X | | | | | | |

† - 71903-A is the undersize part number. When ordering, do not specify an undersize code letter

NOTICE: When ordering oversize and undersize parts, be sure to specify the required oversize and undersize dimension along with the proper part number. For example, to order bearing Part Number (P/N) 18E23886 bearing in 0.003 in. undersize, order P/N 18E23886-M03. Undersize code letter is "M" while oversize code letter is "P". These letters are then followed by the number designating the size in thousandths of an inch.



031BT

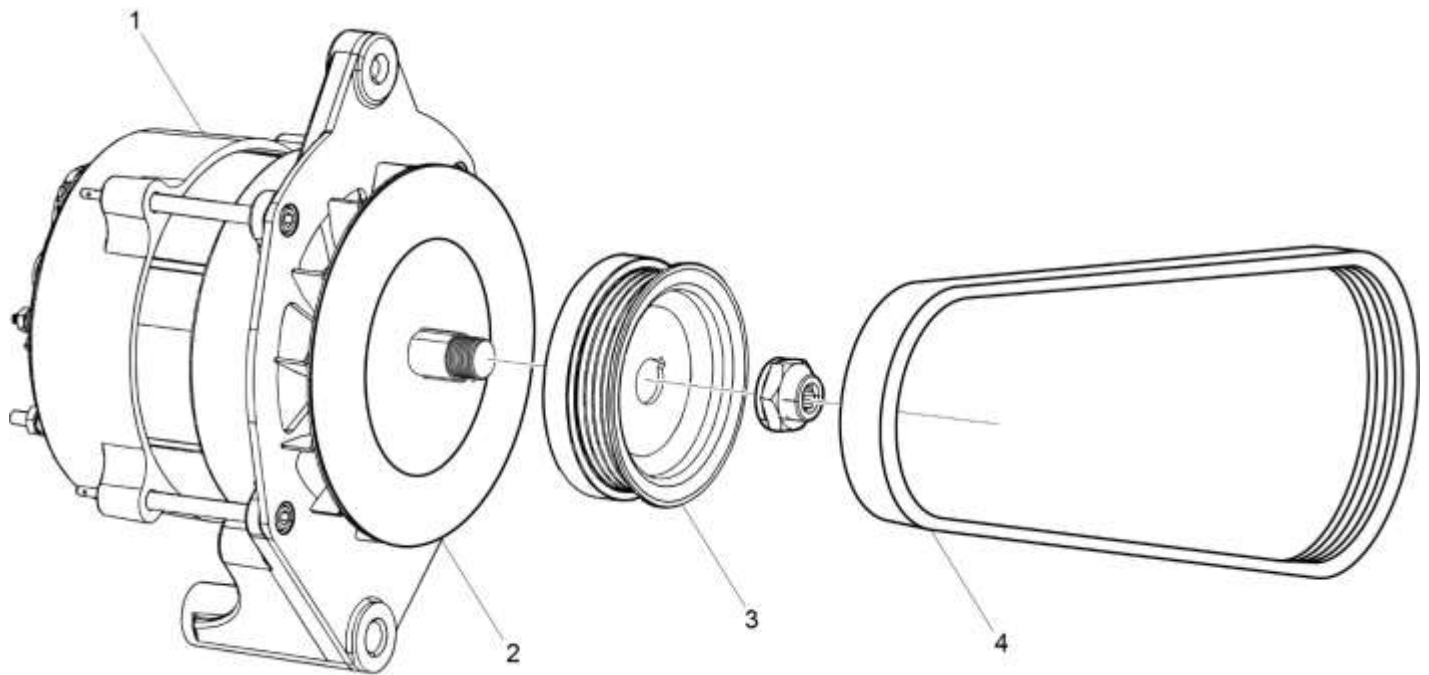
Figure 1

Alternator Mounting and Attaching Parts

NOTE: For Permanent Magnetic Alternator, Refer to 74-20
(Ignition Distribution System)

DC GENERATION
Figure 1 - Alternator Mounting and Attaching Parts

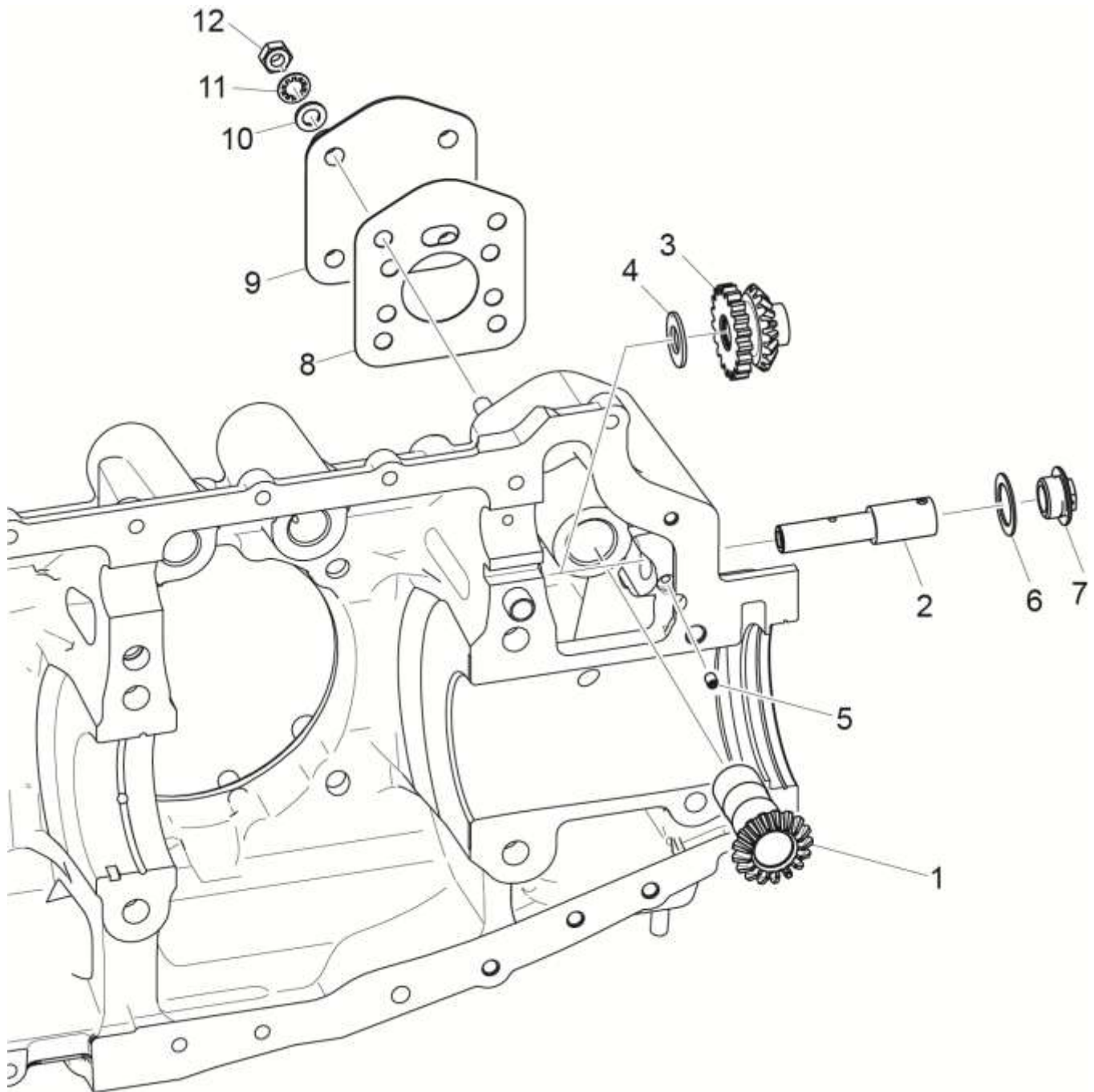
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|---|--------------------|
| 1 | | LW-31H0.88 | BOLT, 5/16-18 x 7/8 long, hex. head, drilled | 1 |
| 2 | | STD-35 | WASHER, 5/16 plain | 1 |
| 3 | | 07F28508 | LINK, Alternator adjusting | 1 |
| 4 | | LW-38H1.09 | BOLT, 3/8-16 X 1 3/32 long, hex drilled | 1 |
| 5 | | STD-1342 | WASHER, 7/8 O.D. x 0.39 I.D. x 1/8 thick | 1 |
| 6 | | LW-10952 | SHIM, 13/16 O.D. x 0.41 I.D. x 0.005 thick | 5 |
| 7 | | 07F21160 | STRUT, Alternator Support | 1 |
| 8 | | LW-31H0.88 | BOLT, 5/16-18 x 7/8 long, hex. head, drilled | 4 |
| 9 | | STD-35 | WASHER, 5/16 plain | 4 |
| 10 | | 07A21156 | BRACKET, Alternator | 1 |
| 11 | | 07A26130 | BRACKET, Alternator, aft | 1 |
| 12 | | AN7-44 | BOLT, 7/16-20 x 4-19/32 long, hex. head | 1 |
| 13 | | STD-632 | WASHER, 7/16 plain | 1 |
| 14 | | LW-14650 | SHIM, 7/8 OD x 15/32 ID X .005 TH | 10 |
| 15 | | AN310-7 | NUT, 7/16-20 plain slotted | 1 |
| 16 | | STD-713 | PIN, Cotter, 3/32 dia. X 3/4 long | 1 |
| 17 | | LW-31H1.06 | BOLT, 5/16-18 X 1-1/16 long, hex. head, drilled | 1 |
| 18 | | STD-1354 | WASHER, 5/16 plain | 1 |
| 19 | | STD-475 | WASHER, 5/16 lock, internal teeth | 1 |



032CR, 033AC, 033AE
Figure 2
Alternator Assembly and Belts

DC GENERATION
Figure 2 - Alternator Assembly and Belts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-----------------------------------|------|--------------|--|--------------------|
| 1 | | 32C28600 | ALTERNATOR ASSEMBLY, 24V-140 amp | 1 |
| 2 | | 32C28550 | ALTERNATOR, 24V-140 amp (HET P/N ES-14024B-3) | 1 |
| 3 | | 36B28509 | PULLEY, Alternator, V-ribbed pk-section, 3.1:1 ratio (3.42 O.D.) | 1 |
| | * | 32C28603 | ALTERNATOR ASSEMBLY, 24V-140 amp | 1 |
| | * | 32C28550 | ALTERNATOR, 24V-140 amp (HET P/N ES-14024B-3) | 1 |
| | * | 36B29585 | PULLEY, Alternator, V-ribbed pk-section, 3.65:1 ratio (2.98 O.D.) | 1 |
| 4 | | 37C28529-985 | BELT, 14mm wide (use with PULLEY P/N 36B28509) | 1 |
| | * | 37C28529-955 | BELT, 14mm wide (use with PULLEY P/N 36B29585) | 1 |
| * Optional for 3.65:1 drive ratio | | | | |

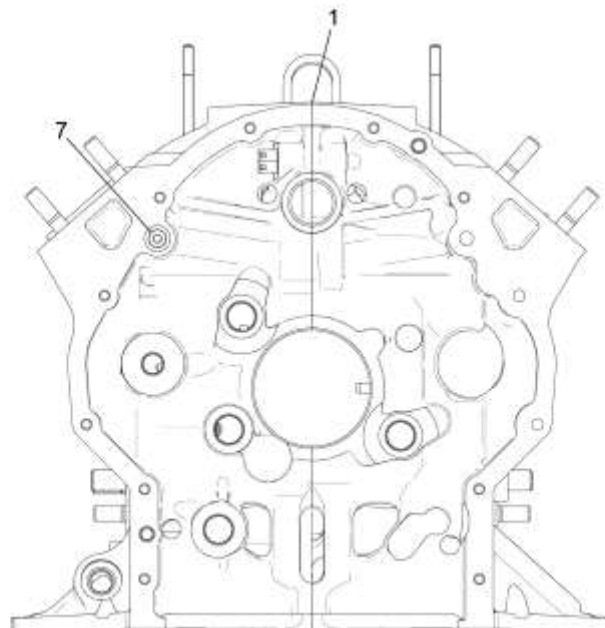
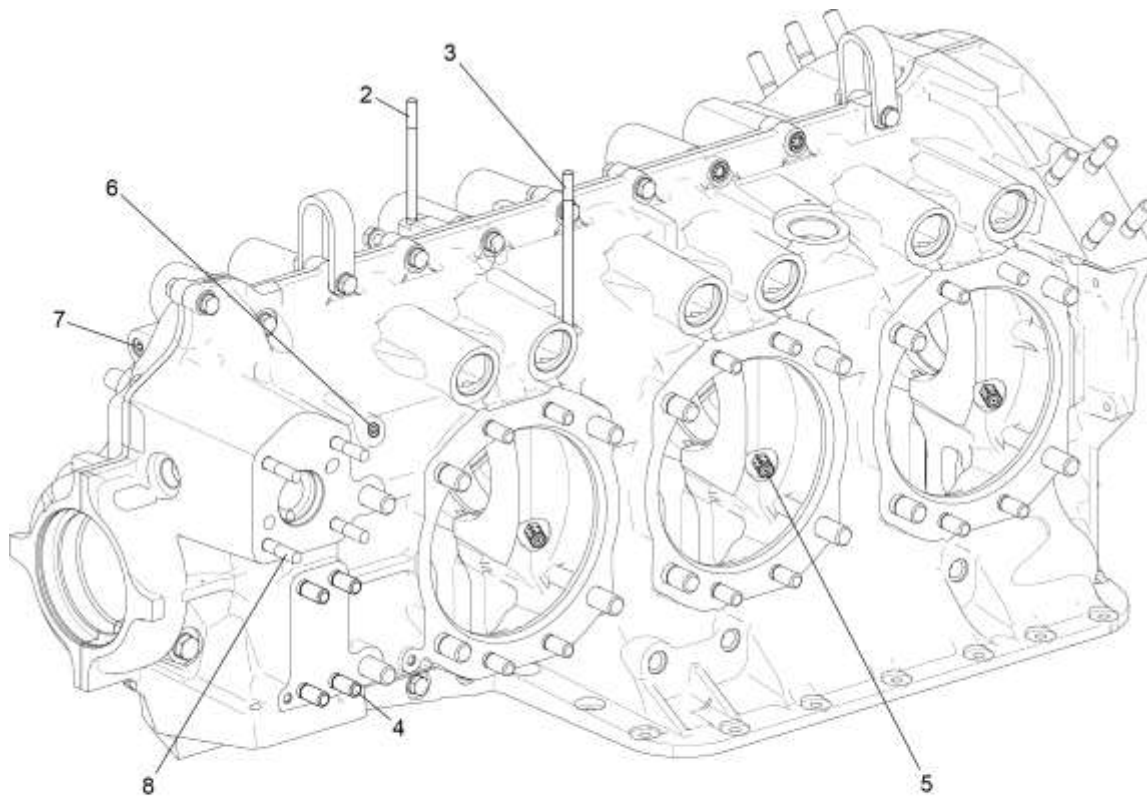


008

Figure 3
Propeller Governor Drive Assembly

FRONT SECTION
Figure 3 - Propeller Governor Drive Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-----------------------|-----------|--------------|--|--------------------|
| 1 | | LW-10442 | GEAR, Propeller governor driven | 1 |
| 2 | | LW-14021 | SHAFT, Propeller governor idler gear | 1 |
| 3 | | LW-10541 | GEAR ASSEMBLY, Propeller governor idler | 1 |
| 4 | AR | 73249 | WASHER, Thrust (0.0585 - 0 .0595 thick) | AR |
| | AR | 73250 | WASHER, Thrust (0.062 - 0.063 thick) | AR |
| | AR | 73251 | WASHER, Thrust (0.0655 - 0.0665 thick) | AR |
| | AR | 73252 | WASHER, Thrust (0.069 - 0.070 thick) | AR |
| | AR | 01L21418 | WASHER, Thrust (0.055 - 0.056 thick) | AR |
| 5 | | AN565B1032H5 | SET SCREW, No. 10-32 x 5/16 long | 1 |
| 6 | | 70455 | GASKET, 25/32 I.D. x 1-1/8 O.D. x 1/16 thick | 1 |
| 7 | | LW-13896 | PLUG, 3/4-16 hex. head | 1 |
| 8 | | 72053 | GASKET, Propeller | 1 |
| 9 | | 72378 | COVER, Governor drive | 1 |
| 10 | | STD-35 | WASHER, 5/16 plain | 4 |
| 11 | | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 12 | | STD-1410 | NUT, 5/16-18 plain | 4 |
| AR as required | | | | |



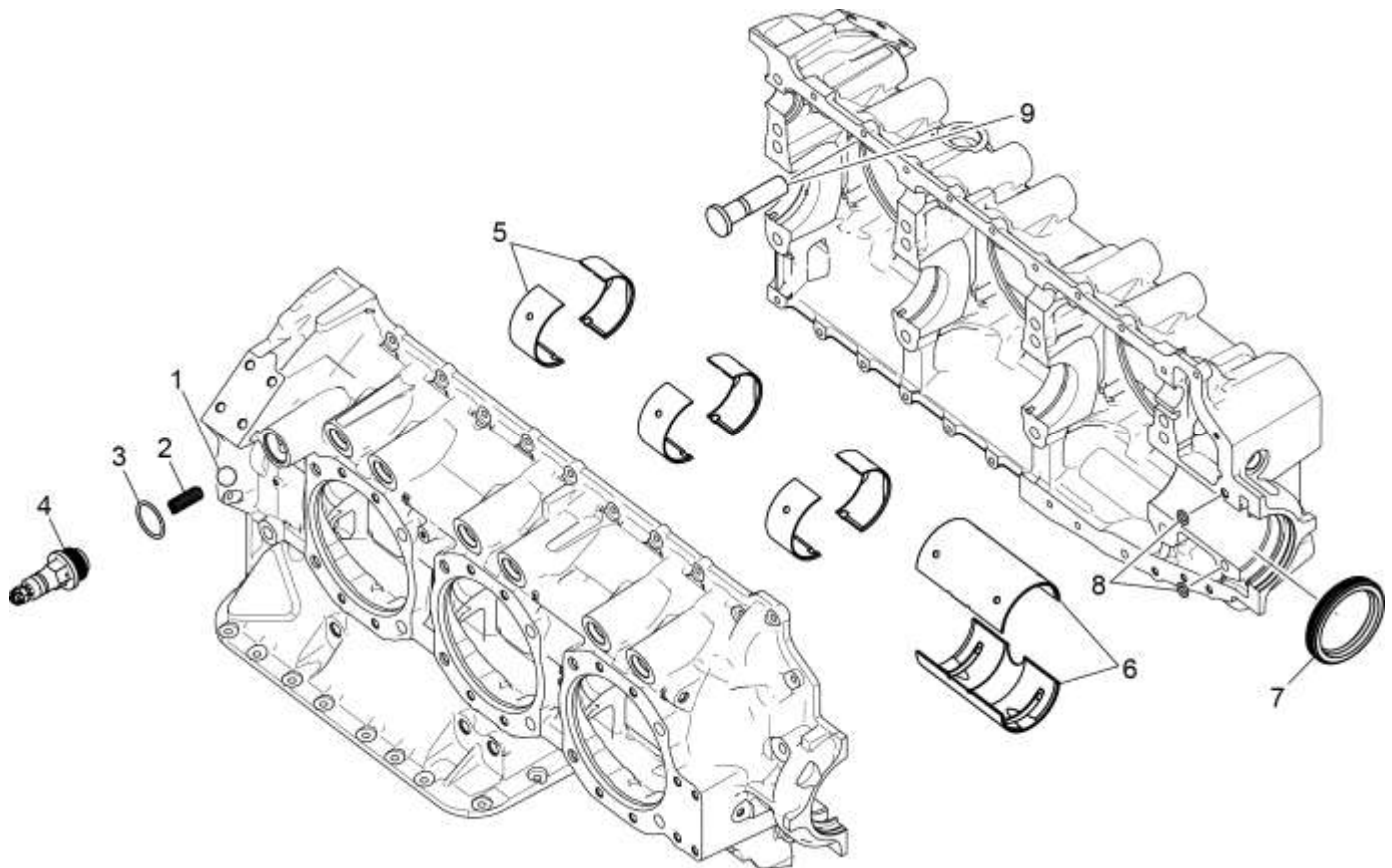
001EX

Figure 4
Crankcase Assembly

POWER SECTION
Figure 4 - Crankcase Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|----------|-------------|---------------------------------|--------------------|
| 1 | P | 11F24028-E3 | CRANKCASE ASSEMBLY, Studding | 1 |
| 2 | | 25C-31 | STUD, 1/4-20 x 3-7/8 long | 1 |
| 3 | | 25C-39 | STUD, 1/4-20 x 4-7/8 long | 1 |
| 4 | | 38-13 | STUD, 3/8-16 x 1-5/8 long | 4 |
| 5 | | 73772 | NOZZLE ASSEMBLY, Piston cooling | 6 |
| 6 | | STD-1339 | PLUG, 1/16-27 NPT | 1 |
| 7 | | 1102 | PLUG, 1/8 pipe | 2 |
| 8 | | 31C-17 | STUD, 5/16-18 x 2-1/8 long | 4 |

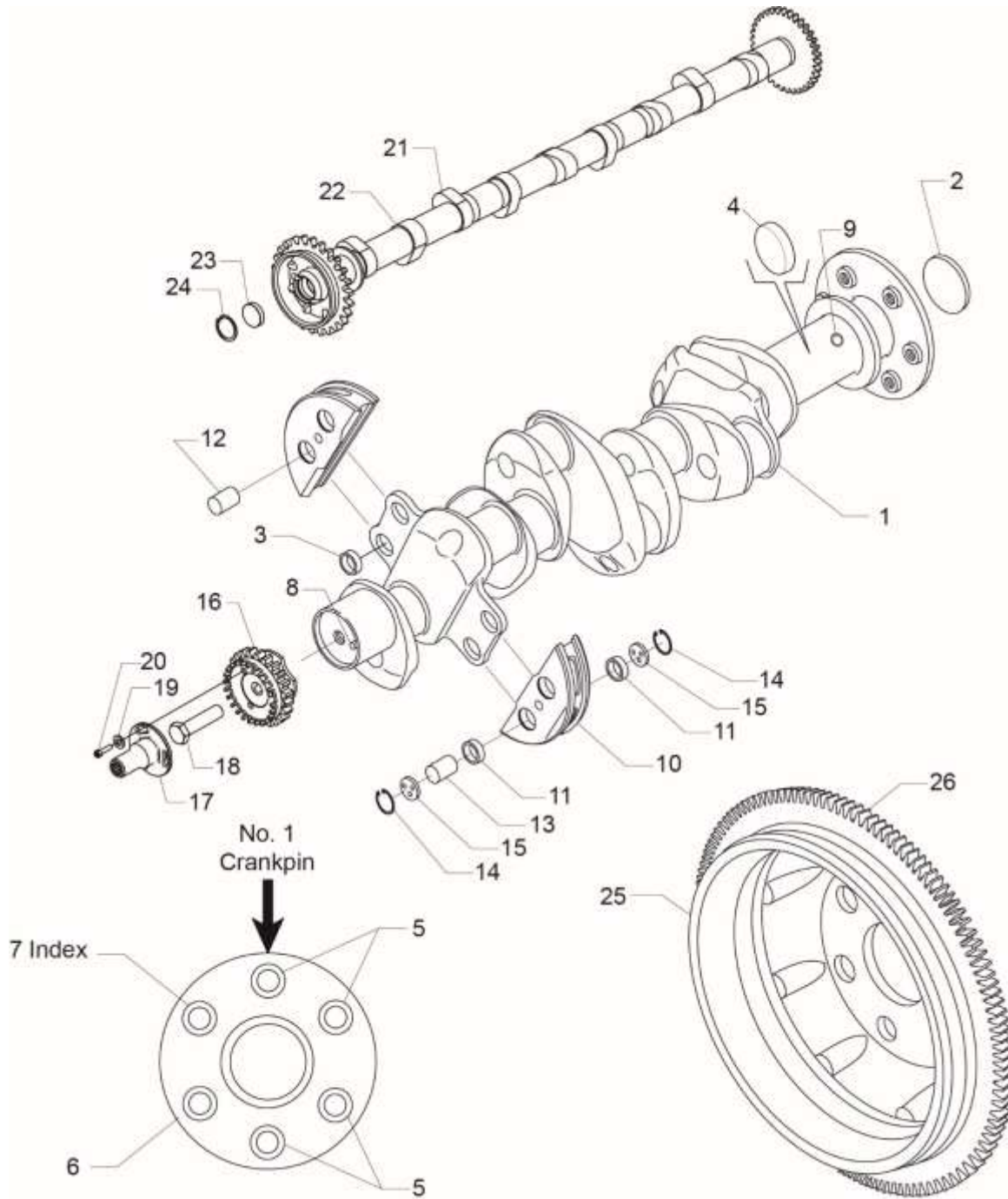
P Lycoming proprietary part - for reference purposes only, cannot be purchased.



002F & 003F
Figure 5
Crankcase Related Parts

POWER SECTION
Figure 5 - Crankcase Related Parts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|--|------|---------------|--|--------------------|
| 1 | | 1028-B | BALL, 11/16 diameter | 1 |
| 2 | * | 68668 | SPRING, Oil pressure relief valve | 1 |
| | * | 61084 | SPRING, Oil pressure relief valve | 1 |
| | * | 77467 | SPRING, Oil pressure relief valve | 1 |
| | * | LW-11713 | SPRING, Oil pressure relief valve | 1 |
| | * | LW-18085 | SPRING, Oil pressure relief valve | 1 |
| 3 | | 06E19769-1.25 | GASKET, 1-1/4 I.D. annular | 1 |
| 4 | | 77808 | VALVE ASSEMBLY, Oil pressure relief | 1 |
| 5 | | 18E23886 | BEARING, Crankshaft | 6 |
| 6 | | 18B23885 | BEARING, Crankshaft, front | 2 |
| 7 | | LW-15628 | SEAL, Crankshaft oil | 1 |
| 8 | | 72091 | RING, Oil seal, 23/64 ID x 1/10 diameter | 2 |
| 9 | | 15B26262 | BODY, Hydraulic tappet | 12 |
| <p>* Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment. Reference latest revision of SSP-1776, Part I for spring identification. Refer to the latest revision of Service Letter L287 and select a spring that provides recommended oil pressure for optimum wastegate solenoid and engine performance.</p> | | | | |

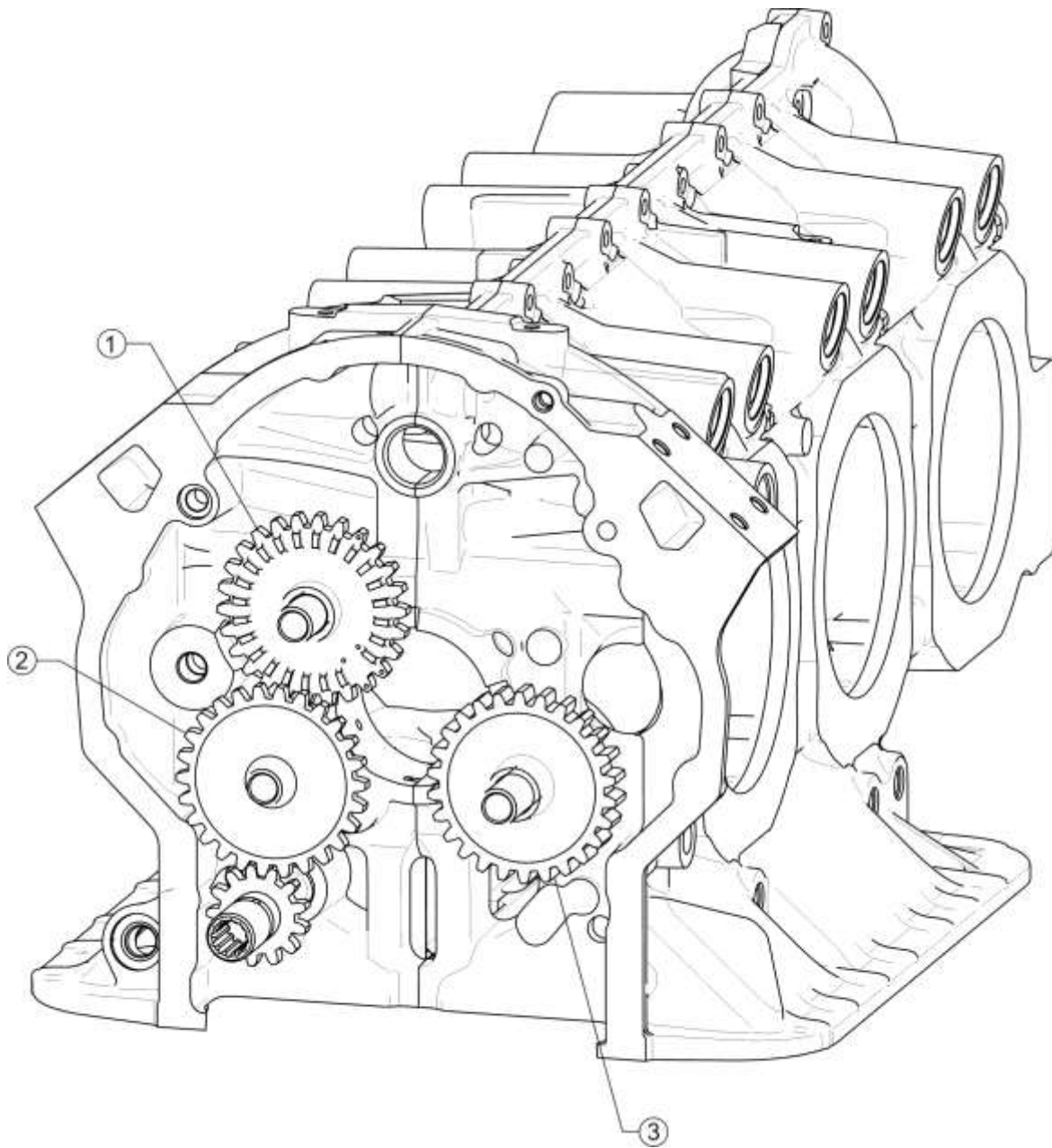


004CR, 005E, 007N, 028AV

Figure 6
Crankshaft, Counterweight, Camshaft and Related Parts

POWER SECTION
Figure 6 - Crankshaft, Counterweight, Camshaft and Related Parts

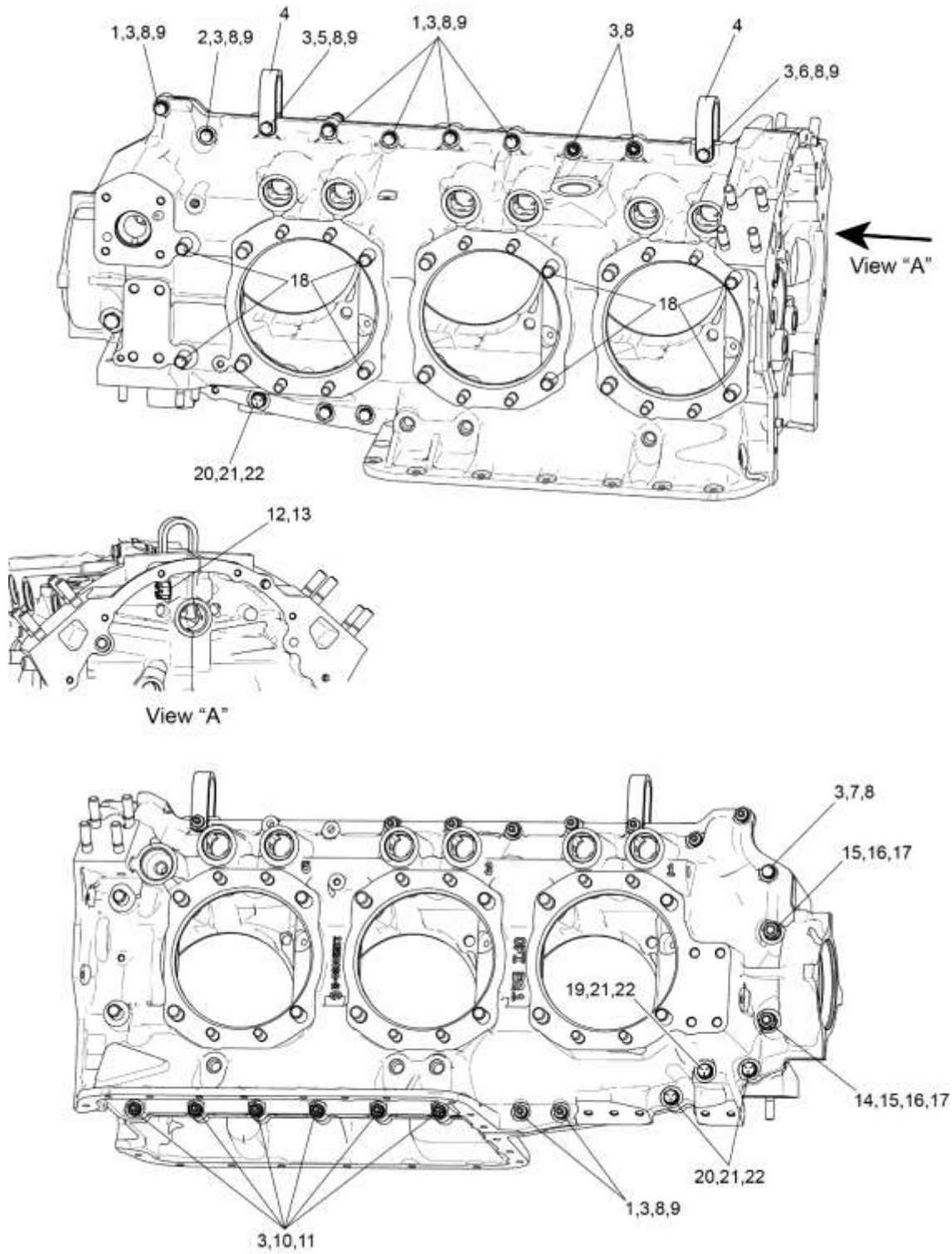
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|--------------|--|--------------------|
| 1 | | 13F47735 | CRANKSHAFT ASSEMBLY | 1 |
| 2 | | STD-1211 | PLUG, 2.00 diameter expansion | 1 |
| 3 | | 73810 | BUSHING, Crankshaft counterweight | 4 |
| 4 | | 60945 | PLUG, 1-1/4 diameter | 1 |
| 5 | | 75656-S | BUSHING, Propeller flange, long | 4 |
| 6 | | 72155-S | BUSHING, Propeller flange, short | 1 |
| 7 | | 79024-S | BUSHING, Propeller flange, indexing | 1 |
| 8 | | STD-2078 | DOWEL, Stepped, 3/8 O.D. x 1/2 long | 1 |
| 9 | | 74306 | TUBE, crankshaft prop, oil | 1 |
| 10 | | LW-19210 | COUNTERWEIGHT ASSEMBLY | 2 |
| 11 | | 71903-A | BUSHING, Dynamic counterweight | 4 |
| 12 | | 76788 | ROLLER, Dynamic counterweight, 6.3 order | 2 |
| 13 | | 73648 | ROLLER, Dynamic counterweight, 5.1 order | 2 |
| 14 | | LW-14820 | RING, Internal retaining | 8 |
| 15 | | 71907 | WASHER, Dynamic counterweight | 8 |
| 16 | | 26G26265 | CRANKSHAFT GEAR ASSEMBLY, | 1 |
| 17 | | 23A26268 | SHAFT DRIVE, Fuel pump | 1 |
| 18 | | 01C26131 | BOLT, 1/2-20 x 1-3/4 long, hex. head | 1 |
| 19 | | STD-8 | WASHER, 1/4 plain | 3 |
| 20 | | NAS1352C4H10 | SCREW, 1/4-20 x 5/8 long, drilled head | 3 |
| 21 | | 15N28398 | CAMSHAFT ASSEMBLY, flat tappet | 1 |
| 22 | | LW-13908 | CAMSHAFT | 1 |
| 23 | | 01L26665 | SPACER, Camshaft | 1 |
| 24 | | STD-2231 | RING, Internal retaining | 1 |
| 25 | | 31M22045 | SUPPORT ASSEMBLY, Starter ring gear | 1 |
| 26 | | 72566 | GEAR, Starter ring, 12/14 pitch | 1 |



011W
Figure 7
Crankshaft Idler Gears and EEC Gear Set

POWER SECTION
Figure 7 - Crankshaft Idler Gears and EEC Gear Set

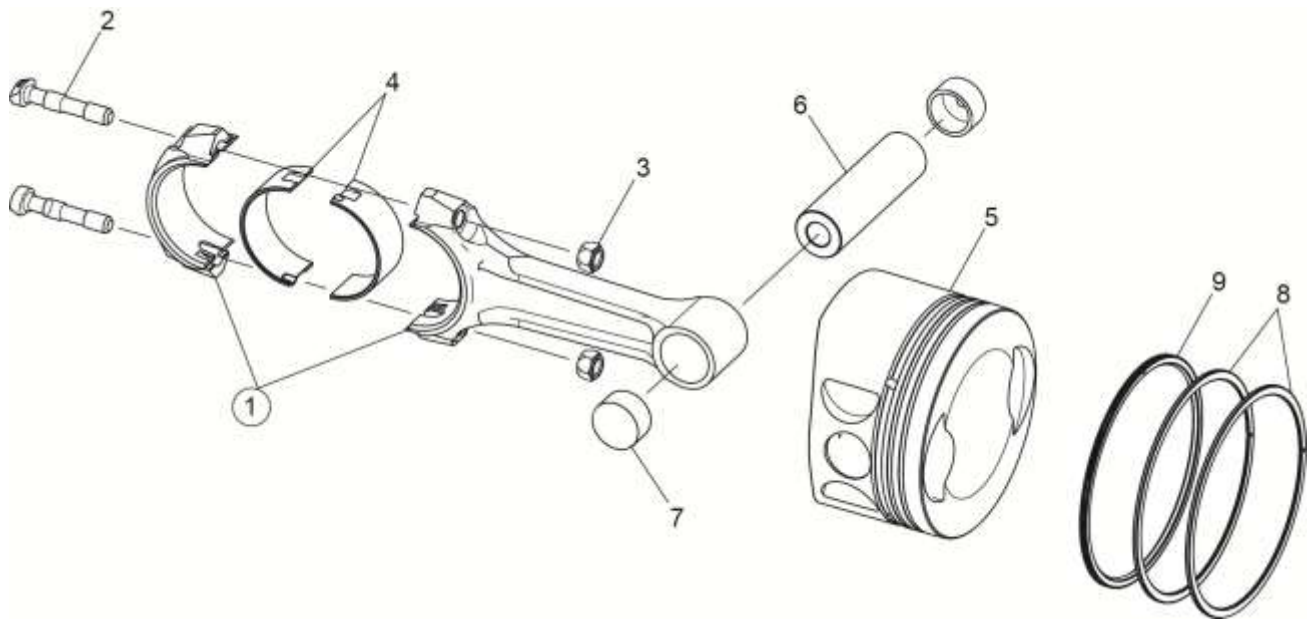
| Figure Item | Code | Part Number | Description | Units per Assembly |
|--------------------|-------------|--------------------|---------------------------------|---------------------------|
| 1 | | 26A26269 | GEAR ASSEMBLY, Crankshaft idler | 1 |
| 2 | | 25B26274 | GEAR ASSEMBLY, High speed idler | 1 |
| 3 | | LW-10296 | GEAR ASSEMBLY, Crankshaft idler | 1 |



009AG
Figure 8
Crankcase Attaching Parts

POWER SECTION
Figure 8 - Crankcase Attaching Parts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|---|--------------------|
| 1 | | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. head | 9 |
| 2 | | LW-25-1.63 | BOLT, 1/4-20 x 1-5/8 long, hex. head | 1 |
| 3 | | STD-8 | WASHER, 1/4 plain | 27 |
| 4 | | 60803 | STRAP, Lifting | 2 |
| 5 | | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. head | 1 |
| 6 | | LW-25-1.88 | BOLT, 1/4-20 x 1-7/8 long, hex. head | 1 |
| 7 | | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. head | 1 |
| 8 | | STD-160 | WASHER, 1/4 lock, internal teeth | 16 |
| 9 | | STD-1411 | NUT, 1/4-20 plain | 13 |
| 10 | | LW-25S1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. head, drilled | 6 |
| 11 | | STD-2249 | NUT, 1/4-20 slotted | 6 |
| 12 | | STD-33 | WASHER, 3/8 plain | 1 |
| 13 | | STD-872 | NUT, 3/8 slotted | 1 |
| 14 | | AN6-34A | BOLT, 3/8-24 x 3-1/2 long, hex. head | 1 |
| 15 | | STD-33 | WASHER, 3/8 plain | 3 |
| 16 | | STD-678 | WASHER, 3/8 lock, internal teeth | 2 |
| 17 | | STD-596 | NUT, 3/8-24 plain | 2 |
| 18 | | 76220 | STUD, 1/2-20 x 10-11/16 long | 8 |
| 19 | | LW-31-2.75 | BOLT, 5/16-18 x 2-3/4 long, hex. | 1 |
| 20 | | LW-31-1.16 | BOLT, 5/16-18 x 1-5/32 long, hex. | 3 |
| 21 | | STD-35 | WASHER, 5/16 plain | 4 |
| 22 | | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |



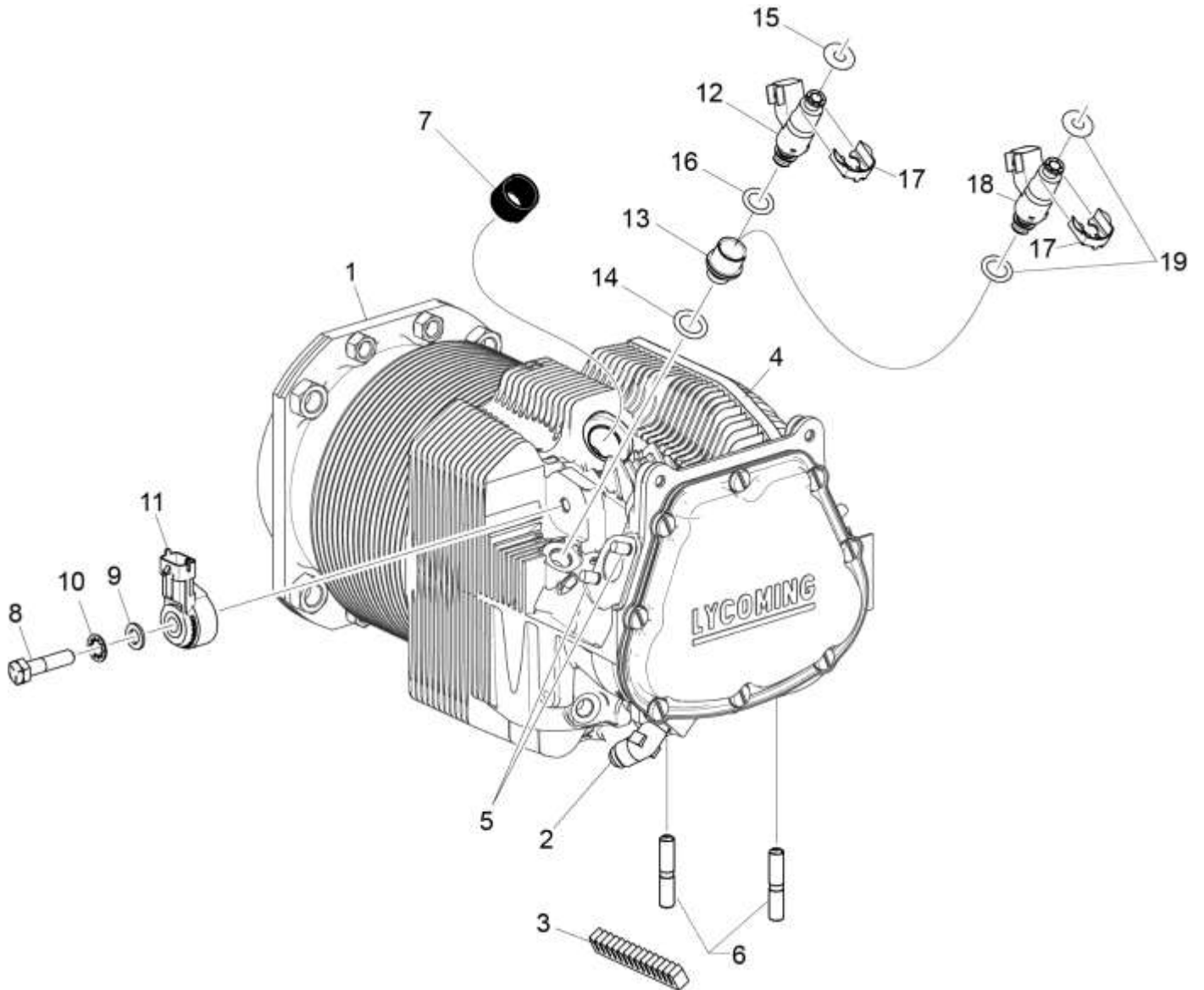
006A & 022AE

Figure 9

Connecting Rods, Pistons, and Ring Assemblies

CYLINDER SECTION
Figure 9 - Connecting Rods, Pistons, and Ring Assemblies

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|-------------|---|--------------------|
| 1 | | LW-19332-S | CONNECTING ROD ASSEMBLY | 6 |
| 2 | * | LW-12596 | BOLT, Connecting rod | 12 |
| 3 | | LW-12186 | NUT, Connecting rod bolt | 12 |
| 4 | | 18N26106 | BEARING, Connecting rod | 12 |
| 5 | | 14D23907 | PISTON, Compression ratio, 7.30:1 | 6 |
| 6 | | LW-14078 | PIN, Piston | 6 |
| 7 | | 72198 | PLUG, Piston pin | 12 |
| 8 | | 74241 | RING, Piston compression | 12 |
| 9 | | 14H29889 | RING, Piston, oil regulating, expander type | 6 |
| * Service use only. Refer to the latest revision of Service Instruction S.I. 1458 | | | | |



023AH & 040DG
Figure 10
Cylinder Assembly

CYLINDER SECTION
Figure 10 - Cylinder Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|---------------|--|--------------------|
| 1 | | 16A26347 | CYLINDER AND HEAD ASSEMBLY, Nitrided | 6 |
| | | 16A30200-01 | CYLINDER AND HEAD ASSEMBLY, Nitrided (Approved alternate for P/N 16A26347) | 6 |
| 2 | | MS20823-6D | ELBOW, 45°, 3/8 flared tube | 6 |
| 3 | | 72343 | STABILIZER, Cylinder head fins, 15 teeth | 6 |
| 4 | | 72344 | STABILIZER, Cylinder head fins, 26 teeth | 6 |
| 5 | | 25C-8 | STUD, 1/4-20 x 1.00 long | 24 |
| 6 | | 31C-13 | STUD, 5/16-18 x 1-5/8 long | 12 |
| 7 | | 69260 | INSERT, Spark plug, 18-1.5 mm | 12 |
| 8 | | LW-31-1.31 | BOLT, 5/16-18 x 1-5/16 long, hex. head | 6 |
| 9 | | STD-35 | WASHER, 5/16 plain | 6 |
| 10 | | STD-475 | WASHER, 5/16 lock, internal teeth | 6 |
| 11 | | 60F29464-CT | SENSOR, Knock, detonation (same on all cyls.) (Replacement for P/N 60F26317-CT) | 6 |
| 12 | * | 61X29461-CT | FUEL INJECTOR (Replacement for P/N 61X26294-CT) | 6 |
| 13 | | 02E29797 | ADAPTER, Fuel injector | 6 |
| 14 | | 06E19769-0.50 | GASKET, Annular, 1/2 I.D. | 6 |
| 15 | | 06C29879-CT | O-RING, Fuel injector, upper (for use with fuel injector P/N 61X29461-CT) | 6 |
| 16 | | 06C29878-CT | O-RING, Fuel injector, lower (for use with fuel injector P/N 61X29461-CT) | 6 |
| 17 | | 03A29095-CT | RETAINER, Fuel injector | 6 |
| 18 | | 61X29461-CT | FUEL INJECTOR | 6 |
| 19 | | 06C29094-CT | KIT, Fuel injector O-ring for use with P/N 61X26294-CT (includes upper O-ring and lower O-ring) | 6 |

* Refer to the latest revisions of Service Instructions No. 1573 and No. 1582 when replacing fuel injectors part number 61X26294-CT with fuel injectors part number 61X29461-CT.

CYLINDER SECTION
Figure 11 - Valve Assembly and Related Parts

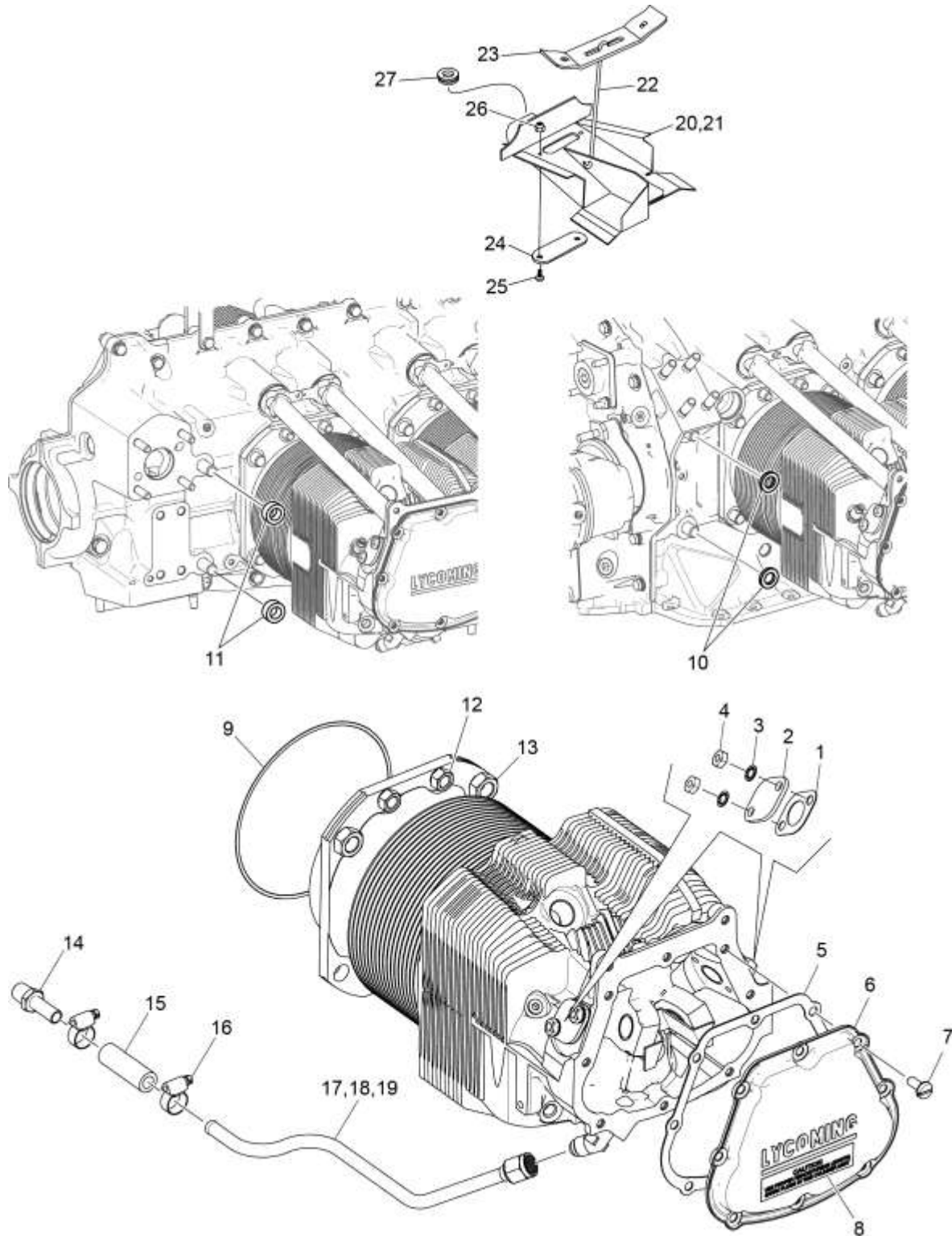
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|--|--------------------|
| 1 | | 17A23937 | VALVE, Intake | 6 |
| 2 | | 17B23935 | VALVE, Exhaust | 6 |
| 3 | | 17D29057 | SPRING, Valve, inner | 12 |
| 4 | | 17D29056 | SPRING, Valve, outer | 12 |
| 5 | | LW-13321 | SEAT, Valve spring, lower intake | 6 |
| 6 | | LW-13322 | SEAT, Valve spring, lower exhaust | 6 |
| 7 | | 69532 | SEAT, Valve spring, upper intake | 6 |
| 8 | | LW-16475 | SEAT, Valve spring, upper exhaust | 6 |
| 9 | | 72050 | KEY, Valve, intake | 12 |
| 10 | | 17C21191 | KEY, Valve, exhaust | 12 |
| 11 | | 17C19386 | CAP, Valve stem, exhaust (rotator type) | 6 |
| 12 | | 62388 | CAP, Valve stem | 6 |
| 13 | | AN4076-1 | FITTING, Temperature measuring element | 6 |
| 14 | | 15B26066 | PLUNGER ASSEMBLY, Hydraulic lifter | 12 |
| 15 | | 15B21319 | SOCKET, Hydraulic tappet | 12 |
| 16 | | 72255 | SHROUD TUBE ASSEMBLY, Push rod | 12 |
| 17 | | 15H21201 | SPRING, Shroud tube | 24 |
| 18 | | 66728 | WASHER, 25/32 I.D. x 1-1/4 O.D. x 1/32 thick | 12 |
| 19 | | 61503 | SLEEVE, Shroud tube seal | 12 |
| 20 | | LW-18661 | SEAL, Shroud tube | 24 |

(continued on next page)

Figure 11 - Valve Assembly and Related Parts (Cont.)

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|-------------|---|--------------------|
| 21 | AR | 15F28835-52 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-53 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-54 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-55 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-56 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-57 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28835-58 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-18 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-19 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-20 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-21 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-22 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-23 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| | AR | 15F28864-24 | ROD ASSEMBLY, Push (A total of 12 required) | AR |
| 22 | * | 17F21186 | ROCKER ASSEMBLY, Valve, intake | 6 |
| 23 | * | 17F21185 | ROCKER ASSEMBLY, Valve, exhaust | 6 |
| 24 | | 74389 | BUSHING, Valve rocker | 12 |
| 25 | | 71549 | WASHER, Valve rocker | 12 |
| 26 | | 72626 | SHAFT, Valve rocker | 12 |
| <p>NOTICE: Various push rod lengths are used to set valve clearances. AR as required * Due to the size of the area where the number is stamped, the last five digits may be all that is shown (21186 or 21185).</p> | | | | |

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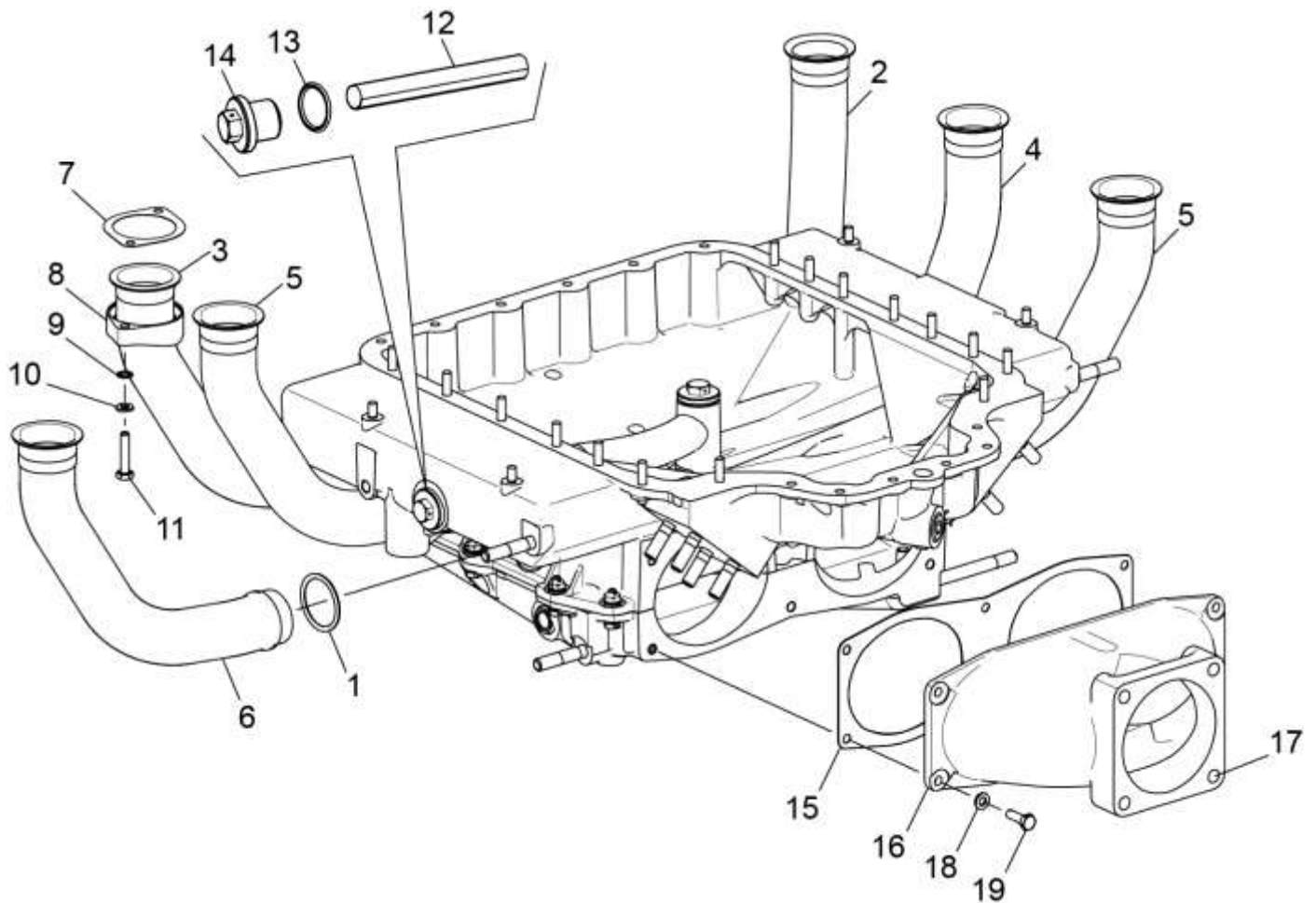


023AH, 025AK, 026A, 036P

Figure 12
Cylinder Related Parts

CYLINDER SECTION
Figure 12 - Cylinder Related Parts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|---------------|---|--------------------|
| 1 | | 66732 | GASKET, Valve rocker shaft cover | 12 |
| 2 | | 72710 | COVER, Valve rocker shaft | 12 |
| 3 | | STD-160 | WASHER, 1/4 lock, internal teeth | 24 |
| 4 | | STD-1411 | NUT, 1/4-20 plain | 24 |
| 5 | | 06B26811 | GASKET, Rocker box cover - silicone | 6 |
| 6 | | 68795 | COVER ASSEMBLY, Rocker box | 6 |
| 7 | | STD-1925 | SCREW, 1/4-20 x 5/8 long, pan. head, self-locking | 48 |
| 8 | | 74494 | PLATE, Spark plug reach caution | 6 |
| 9 | | 71481 | RING, Oil seal, 3/32 diameter x 4-27/32 I.D. | 6 |
| 10 | | 77906 | SPACER, 33/64 I.D. x 7/8 O.D. x 1/8 thick | 2 |
| 11 | | 74887 | SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 thick | 2 |
| 12 | | 383-B | NUT, 3/8-24 plain | 24 |
| 13 | | STD-2090 | NUT, 1/2-20 plain | 28 |
| 14 | | STD-684 | NIPPLE, Straight, 3/8 I.D. hose | 6 |
| 15 | | STD-2180 | HOSE, 3/8 I.D. x 1-13/16 long | 6 |
| 16 | ** | LW-15592-5-04 | CLAMP, Hose, 7/16 O.D. | 12 |
| | ** | LW-15592-5-05 | CLAMP, Hose | 12 |
| 17 | | 72702 | TUBE ASSEMBLY, Cyl. hd. oil drain, cyl. No.1 | 1 |
| 18 | | 72703 | TUBE ASSEMBLY, Cyl. hd. oil drain, cyl. No. 2 | 1 |
| 19 | | 73027 | TUBE ASSEMBLY, Cyl. hd. oil drain, cyls. No. 3, 4, 5, and 6 | 4 |
| 20 | * | LW-13430 | BAFFLE ASSEMBLY, Intercylinder | 1 |
| 21 | * | 75338 | BAFFLE ASSEMBLY, Intercylinder | 3 |
| 22 | | 71610 | HOOK, Intercylinder baffle retainer | 4 |
| 23 | | 71611 | RETAINER, Intercylinder baffle | 4 |
| 24 | | 72834 | COVER, Baffle, ignition cable hole | 4 |
| 25 | | STD-692 | SCREW, No. 10-32 x 1/2 long, round head | 8 |
| 26 | | STD-670 | LOCK NUT, No. 10-32 | 8 |
| 27 | | MS34589-22X | GROMMET | 1 |
| <p>* P/N LW-13430 is between cylinders No. 2 and 4. P/N 75338 is between the remaining cylinders.</p> <p>** Use only in complete sets of the same part number</p> | | | | |



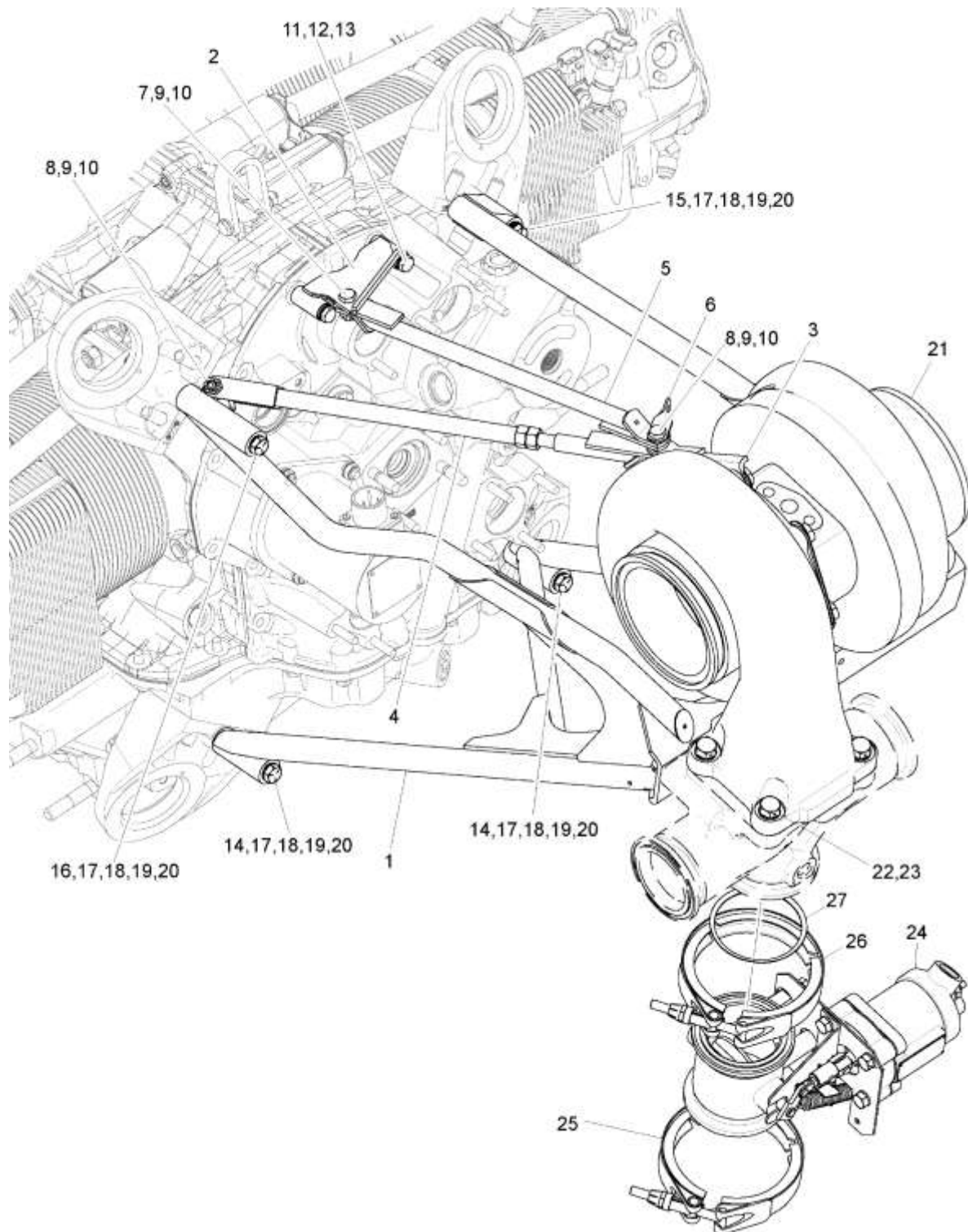
020C, 021A, & 027A

Figure 13

Intake Pipes, Oil Suction Screen, and Air Inlet Housing

TURBOCHARGER SYSTEM
Figure 13 - Intake Pipes, Oil Suction Screen, and Air Inlet Housing

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|---------------|--------------------------------------|--------------------|
| 1 | | 72711 | RING, Seal, intake pipes | 6 |
| 2 | | 42E31611 | PIPE, Intake, cylinder No. 1 | |
| 3 | | 42E31612 | PIPE, Intake, cylinder No. 2 | |
| 4 | | 42E31613 | PIPE, Intake, cylinder No. 3 | |
| 5 | | 42E31614 | PIPE, Intake, cylinders No. 4 and 5 | |
| 6 | | 42E31615 | PIPE, Intake, cylinder No. 6 | |
| 7 | | 71973 | GASKET, 2 bolt flange, 1-13/16 I.D. | 6 |
| 8 | | 74360 | FLANGE, Intake pipe, upper | 6 |
| 9 | | STD-8 | WASHER, 1/4 plain | 12 |
| 10 | | STD-160 | WASHER, 1/4 lock, internal teeth | 12 |
| 11 | | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. head | 12 |
| 12 | | 60422 | SCREEN, Oil suction | 1 |
| 13 | | 06E19769-1.00 | GASKET, Annular, 1.00 I.D. | 1 |
| 14 | | LW-12545 | PLUG, 5/8 hex. head x 1.00-20 thread | 1 |
| 15 | | 72210 | GASKET, Air throttle housing | 1 |
| 16 | | 77998 | HOUSING ASSEMBLY, Air inlet | 1 |
| 17 | | STD-1164 | INSERT, 5/16-18 x 5/8 long | 4 |
| 18 | | STD-8 | WASHER, 1/4 plain | 6 |
| 19 | | LW-25-0.81 | BOLT, 1/4-20 x 13/16 long, hex. head | 6 |

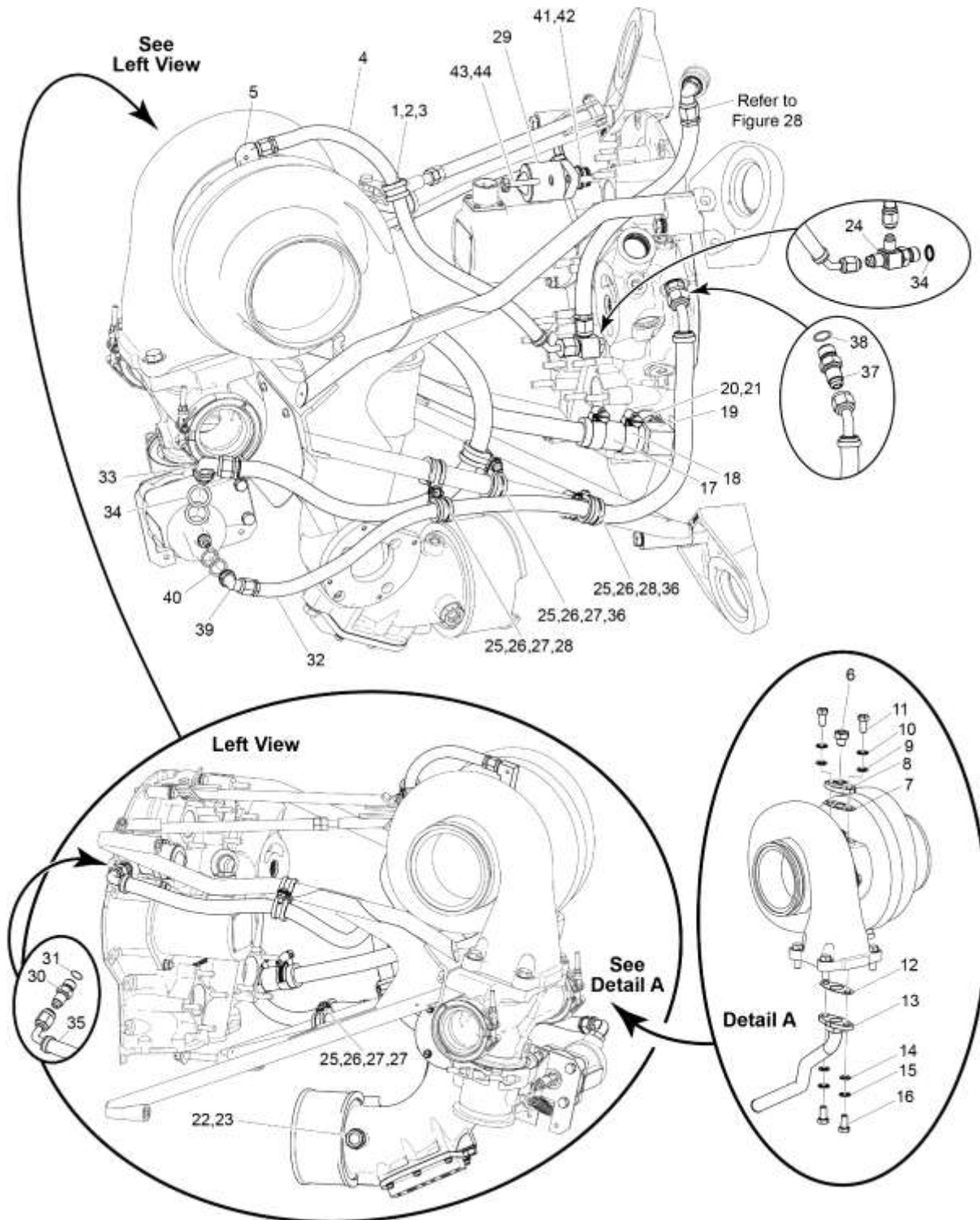


052T
Figure 14
Turbocharger, Supports, and Attaching Parts

TURBOCHARGER SYSTEM
Figure 14 - Turbocharger, Supports, and Attaching Parts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|---|--------------------|
| 1 | | 07E29522 | SUPPORT ASSEMBLY, Turbocharger J, TIO-540 | 1 |
| 2 | | LW-18459 | BRACKET, Support rod, turbo | 1 |
| 3 | | LW-12435 | PLATE, Top support | 1 |
| 4 | | LW-16965 | ROD, Top support, left | 1 |
| 5 | | LW-18248 | ROD, Top support, right | 1 |
| 6 | | 72815 | BRACKET, Support clamp, 90° | 1 |
| 7 | | LW-25S0.77 | BOLT, 1/4-20 x 49/64 long, drilled end | 1 |
| 8 | | LW-25S1.14 | BOLT, 1/4-20 x 1-9/64 long, drilled end | 2 |
| 9 | | STD-1864 | NUT, 1/4-20 slotted | 3 |
| 10 | | STD-68 | PIN, 1/16 diameter x 1/2 long | 3 |
| 11 | | STD-8 | WASHER, 1/4 plain | 2 |
| 12 | | LW-25-2.00 | BOLT, 1/4-20 x 2.00 long, hex. head | 2 |
| 13 | | STD-160 | WASHER, 1/4 lock, internal teeth | 2 |
| 14 | | LW-31S4.56 | BOLT, 5/16-18 x 4-7/16 long, drilled end | 2 |
| 15 | | LW-31S3.94 | BOLT, 5/16-18 x 3-15/16 long, drilled end | 1 |
| 16 | | LW-31S5.44 | BOLT, 5/16-18 x 5-7/16 long, drilled end | 1 |
| 17 | | STD-2205 | WASHER, Plain 5/16, thin | 4 |
| 18 | | STD-2197 | WASHER, 21/64 I.D. x 13/64 O.D. x 1/16 | 4 |
| 19 | | STD-1420 | NUT, 5/16-18 slotted | 4 |
| 20 | | STD-68 | PIN, Cotter, 1/16 diameter x 1/2 long | 4 |
| 21 | | LW-12463 | TURBOCHARGER | 1 |
| 22 | | AN960C616 | WASHER, 3/8 plain | 6 |
| 23 | | STD-2145 | BOLT, 3/8-16 x 1-3/16 long hex. head | 6 |
| 24 | * | 47E31569 | VALVE, Exhaust bypass | 1 |
| 25 | ** | LW-12093-6 | COUPLING, V-band, 2-1/4 O.D. tube | 1 |
| 26 | | LW-12125-3 | COUPLING, V-band, 2-1/4 O.D. tube | 1 |
| 27 | | 75845 | GASKET, V-band coupling, 2-1/4 | 1 |

* Exhaust bypass valve P/N 47E31569 supersedes P/N 47E29907. Refer to Service Instruction No. 1589 for additional details.
** V-band coupling P/N LW-12093-6 to attach the tailpipe to the wastegate exit is shipped loose with the engine.



054AN, 055AR
Figure 15
Turbocharger Hoses and Related Parts - Right Side View

TURBOCHARGER SYSTEM
Figure 15 - Turbocharger Hoses and Related Parts

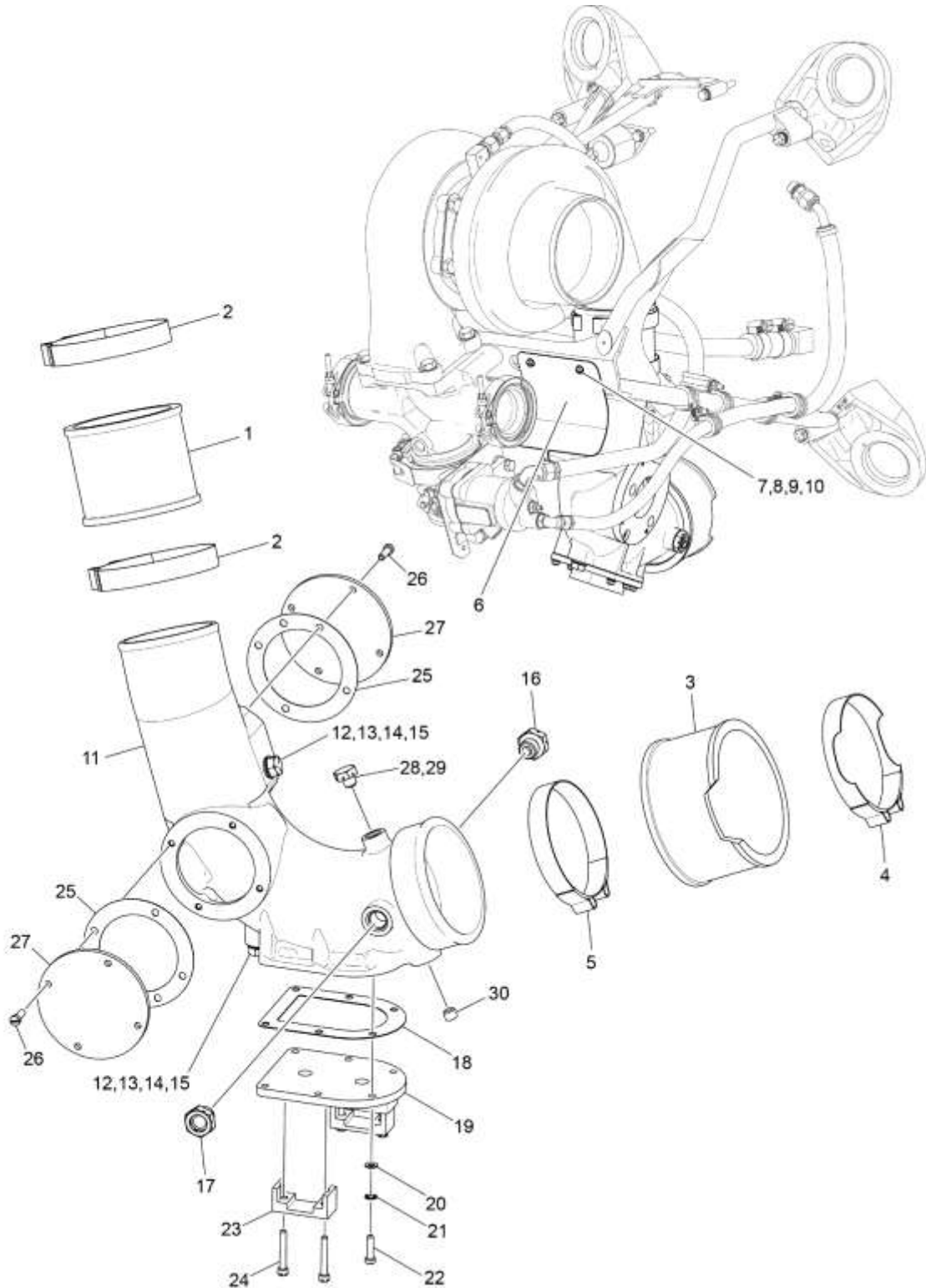
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|----------------|---|--------------------|
| 1 | | LW-16266-10-63 | CLAMP, 5/8 I.D. x No. 10 screw | 1 |
| 2 | | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. head | 1 |
| 3 | | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 4 | | LW-12878-4S170 | HOSE ASSEMBLY, 1/4 hose, 45° elbow | 1 |
| 5 | | LW-12690 | ELBOW, 90° tube to male | 1 |
| 6 | | STD-1932 | BUSHING, 1/4 to 1/8 NPT | 1 |
| 7 | | 75371 | GASKET, Turbo oil inlet adapter | 1 |
| 8 | | LW-14465 | ADAPTER, Turbo oil | 1 |
| 9 | | STD-33 | WASHER, 3/8 plain | 2 |
| 10 | | STD-678 | WASHER, 3/8 lock, internal teeth | 2 |
| 11 | | LW-38-0.75 | BOLT, 3/8-16 x 3/4 long, hex. head | 2 |
| 12 | | 78903 | GASKET, Turbo oil drain | 1 |
| 13 | | LW-18307 | TUBE ASSEMBLY, Turbo oil drain | 1 |
| 14 | | STD-33 | WASHER, 3/8 plain | 2 |
| 15 | | STD-678 | WASHER, 3/8 lock, internal teeth | 2 |
| 16 | | LW-38-0.75 | BOLT, 3/8-16 x 3/4 long, hex. head | 2 |
| 17 | | 73781 | HOSE, 3/4 I.D. x 2-1/2 long | 1 |
| 18 | | LW-15592-8-12 | CLAMP, Hose | 2 |
| 19 | | LW-18231 | ELBOW, Hose to universal 90° | 1 |
| 20 | | LW-13487 | NUT, Turbo oil drain | 1 |
| 21 | | MS29512-10 | SEAL, Oil, 7/64 dia. sect. x 3/4 I.D. | 1 |
| 22 | | AN814-6L | PLUG, 9/16-18, hex. head | 1 |
| 23 | | MS29512-06 | O-RING, 15/32 I.D. x 5/64 section | 1 |
| 24 | | 74369 | TEE, 1/4 TUB-Adj.w/ straight thd. on run. | 1 |
| 25 | | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. head | 4 |
| 26 | | STD-670 | LOCK NUT, No. 10-32 | 4 |
| 27 | | LW-16266-10-75 | CLAMP, 3/4 I.D. x No. 10 screw | 4 |
| 28 | | LW-16266-10-63 | CLAMP, 5/8 I.D. x No. 10 screw | 2 |

(continued on next page)

Figure 15 - Turbocharger Hoses and Related Parts (Cont.)

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|----------------|---|--------------------|
| 29 | ◆ | 02L26305 | VALVE, Solenoid, 2-way | 1 |
| | ◆ | 02L29677 | VALVE, Solenoid, 2-way | 1 |
| 30 | | LW-16561 | NIPPLE, 1/4 tube to 9/16-18 | 1 |
| 31 | | MS29512-06 | O-RING | 1 |
| 32 | | LW-12878-4S260 | HOSE ASSEMBLY, 1/4 hose, 45° elbow | 1 |
| 33 | | 72376-CT | 90° ELBOW, 1/4 tube x 7/16 | 1 |
| 34 | | MS29512-04 | O-RING | 2 |
| 35 | | LW-12877-6S330 | HOSE ASSEMBLY, Teflon 3/8 hose, 90° elbow with straight fitting | 1 |
| 36 | | LW-16266-10-75 | CLAMP, 3/4 I.D. x No. 10 screw | 2 |
| 37 | | 75739-CT | NIPPLE, 3/8 flared tube, 9/16-18 | 1 |
| 38 | | MS29512-06 | O-RING | 1 |
| 39 | | 72377 | ELBOW, 3/8 flared tube adjustable | 1 |
| 40 | | MS29512-06 | O-RING | 1 |
| 41 | | MS28775-018 | O-RING | 1 |
| 42 | | MS28775-021 | O-RING | 1 |
| 43 | | LW-25H1.00 | BOLT, 1/4-20 x 1.00 long, hex. head, drilled | 1 |
| 44 | | STD-8 | WASHER, 1/4 plain | 1 |
| ◆ Refer to the latest revision of Service Instruction No. 1573 for Solenoid Valve Part Numbers, ECU Part Numbers, Fuel Injector Part Numbers, and Calibration Tables that must be used together | | | | |

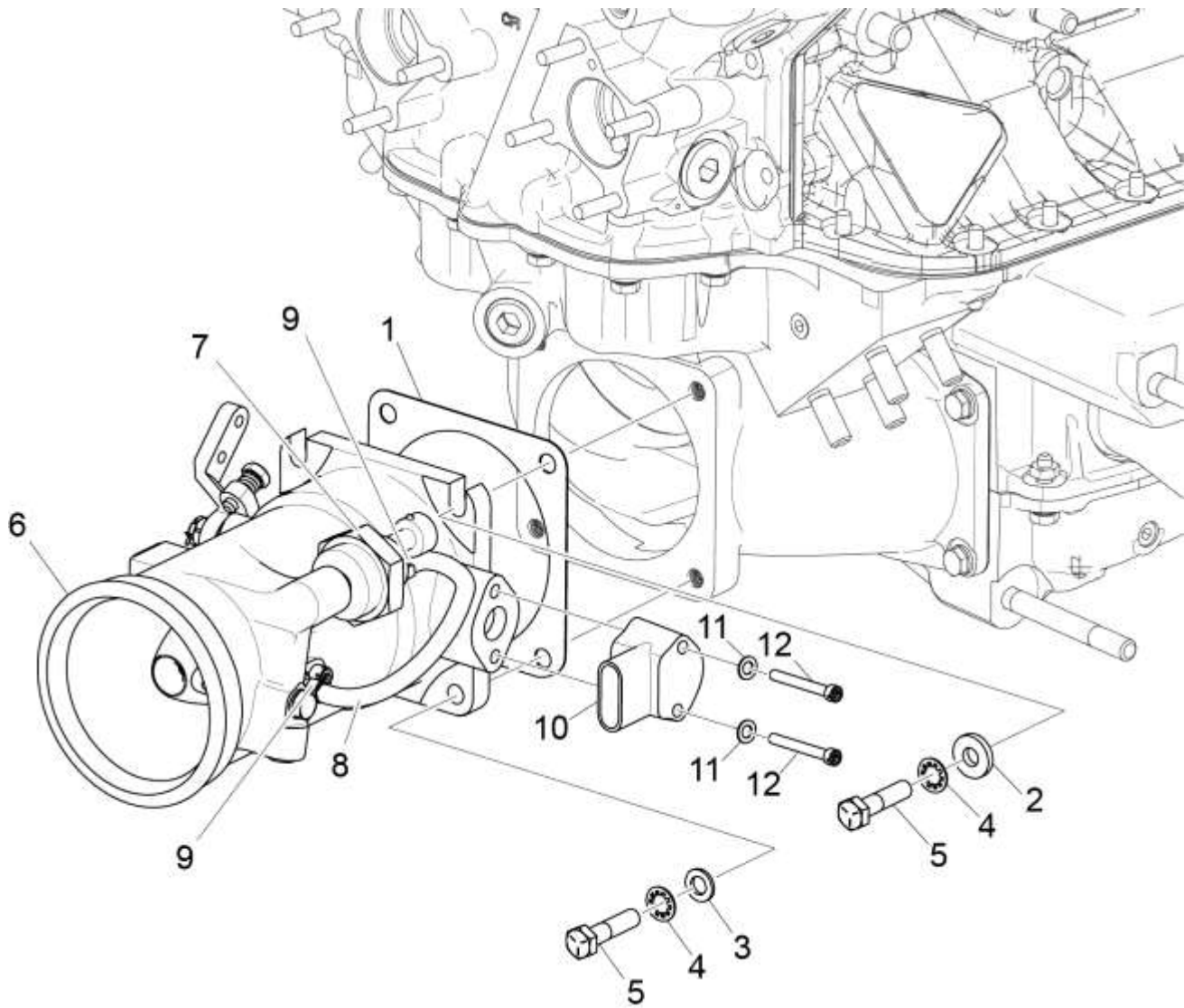
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053AN
Figure 16
Rear Turbo Air Inlet Housing

TURBOCHARGER SYSTEM
Figure 16 - Rear Turbo Air Inlet Housing

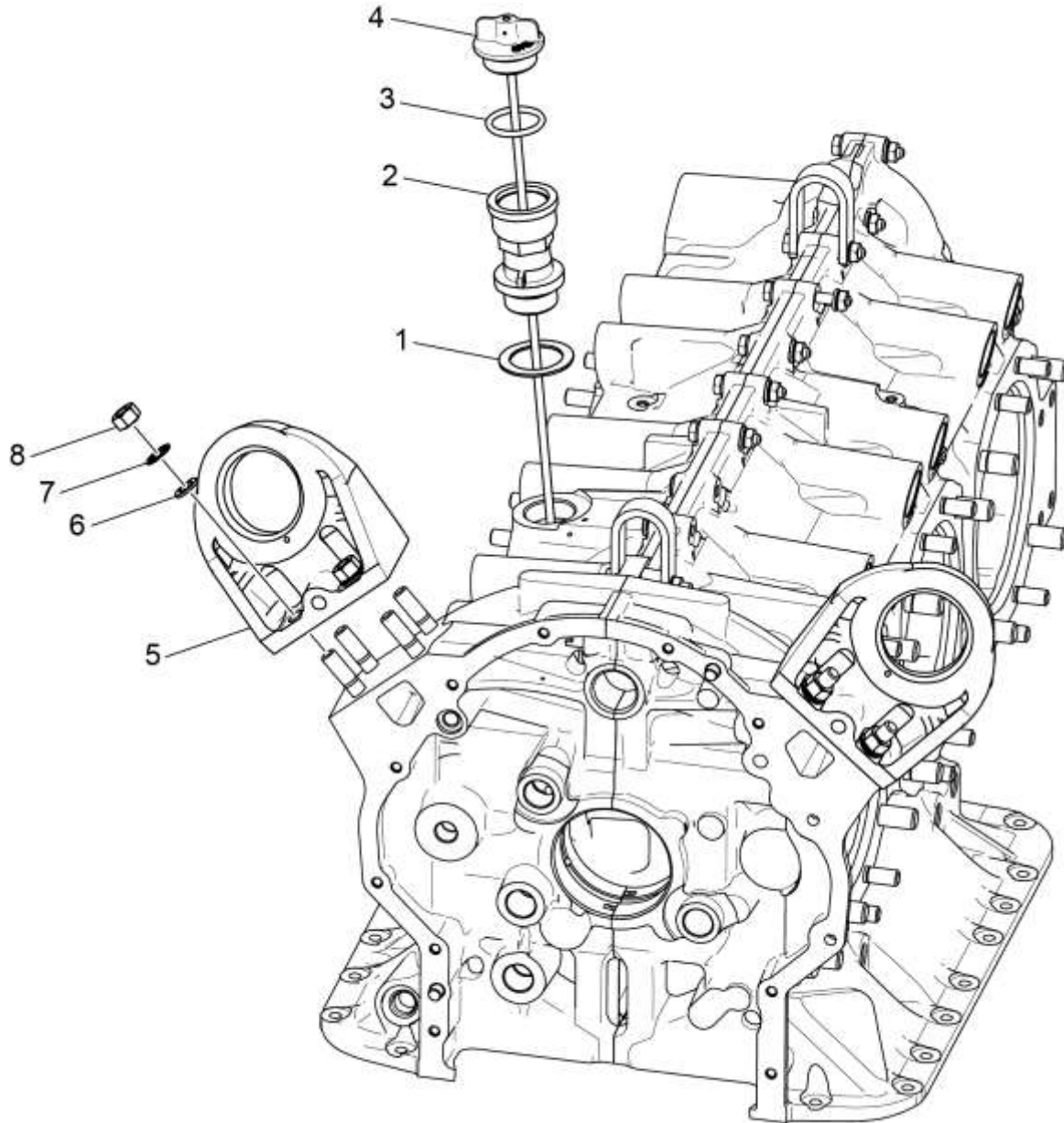
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-----------------|---|--------------------|
| 1 | | LW-12434 | HOSE, 3.00 I.D. x 2-15/16 long | 1 |
| 2 | | LW-15858-62-350 | CLAMP, T-bolt | 2 |
| 3 | | LW-15569 | HOSE, Fuel injector inlet | 1 |
| 4 | | 07C29900 | CLAMP, T-bolt, 4-3/8 dia. | 1 |
| 5 | | LW-15858-62-443 | CLAMP, T-bolt | 1 |
| 6 | | 76791 | BAFFLE, Transition, turbocharger | 1 |
| 7 | | STD-110 | SCREW, No. 10-24 x 1/2 long, fill. head | 2 |
| 8 | | STD-251 | WASHER, No. 10 lock, internal lock | 2 |
| 9 | | STD-420 | NUT, No. 10-24 plain | 2 |
| 10 | | STD-425 | WASHER, No. 10 plain | 2 |
| 11 | | LW-12466 | BOX, Air inlet | 1 |
| 12 | | LW-38-0.59 | BOLT, 3/8-16 x 19/32 long, hex. head | 2 |
| 13 | | STD-33 | WASHER, 3/8 plain | 2 |
| 14 | | STD-678 | WASHER, 3/8 lock, internal teeth | 2 |
| 15 | | MS29512-06 | O-RING, 15/32 I.D. x 5/64 section | 2 |
| 16 | | AN814-6L | PLUG, 9/16-18 hex. head | 1 |
| 17 | | 74797 | FITTING, 9/16-18 x 1/8-27 NPT | 1 |
| 18 | | 77723 | GASKET, Turbocharge by-pass | 1 |
| 19 | | 03D29691 | COVER, Air inlet housing | 1 |
| 20 | | STD-28 | WASHER, No. 10 plain | 14 |
| 21 | | STD-251 | WASHER, No. 10, internal lock | 6 |
| 22 | | STD-1501 | SCREW, No. 10-24 x 3/4 long fill. head | 6 |
| 23 | | 07C26303 | HOLD DOWN, Deck pressure sensor | 2 |
| 24 | | NAS1352C3H20 | SCREW, No. 10-24 x 1-1/4 long, socket | 4 |
| 25 | | 73314 | GASKET, Density and differential | 2 |
| 26 | | STD-375 | SCREW, No. 10-24 x 5/8 long fill. head | 8 |
| 27 | | 42B26926 | COVER, Induction | 2 |
| 28 | | MS29512-03 | O-RING, 19/64 I.D. x .1/16 section | 1 |
| 29 | | AN814-3L | PLUG AND BLEEDER, 3/8-24 UNF dr. | 1 |
| 30 | | 1102 | PLUG, 1/8-27 NPT, allen head | 1 |



039EW
Figure 17
Electronic Throttle Body

TURBOCHARGER SYSTEM
Figure 17 - Electronic Throttle Body

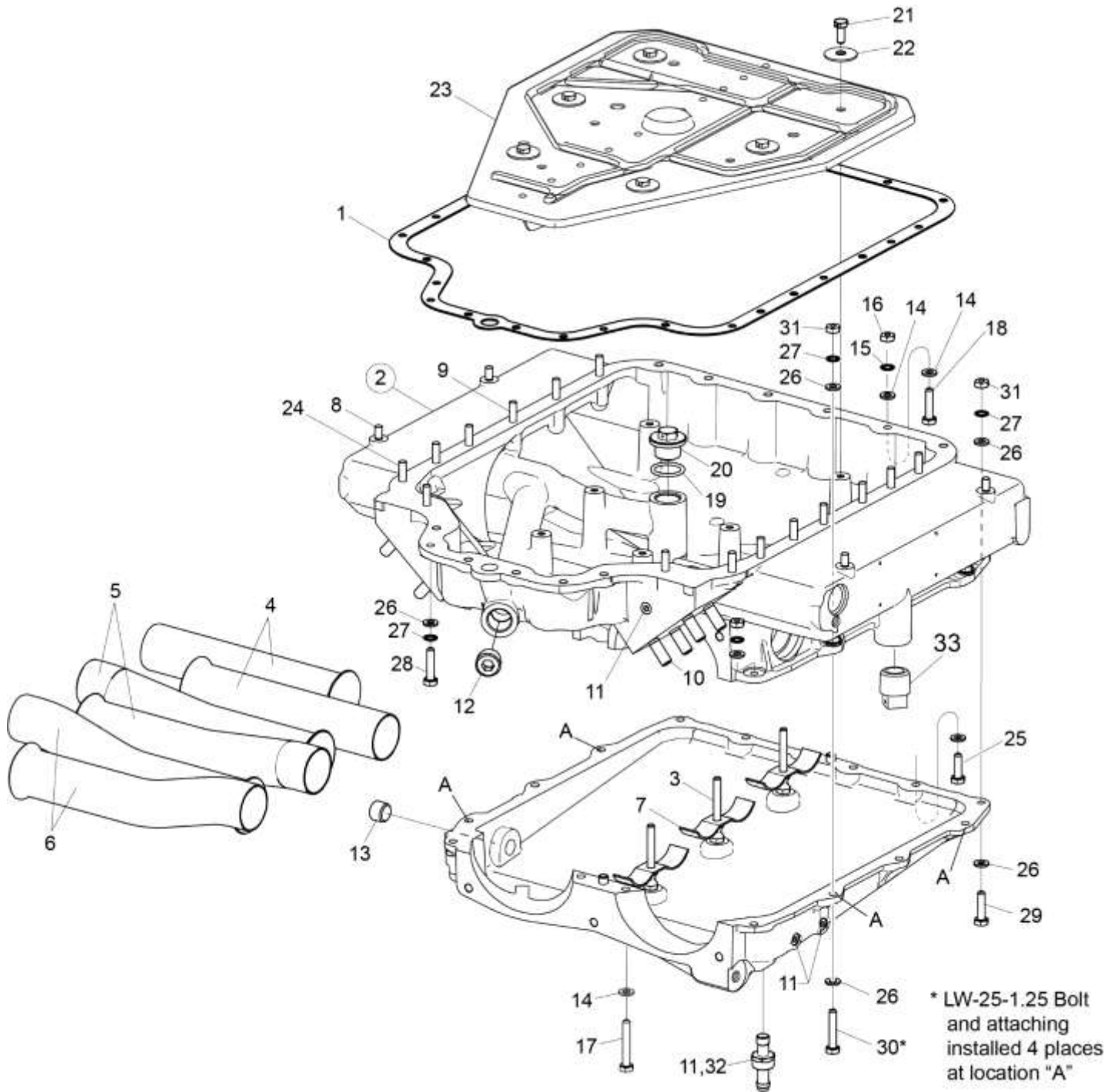
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|---------------|--|--------------------|
| 1 | | 73032 | GASKET, Air inlet housing | 1 |
| 2 | | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8 thick | 2 |
| 3 | | STD-35 | WASHER, 5/16 plain | 2 |
| 4 | | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 5 | | LW-31-1.31 | BOLT, 5/16-18 x 1-5/16 long | 4 |
| 6 | | 65T28321 | THROTTLE BODY ASSEMBLY | 1 |
| 7 | | 60E26316-CT | SENSOR, Low pressure transducer | 1 |
| 8 | | 02M26336 | HOSE, Throttle body, 5/16 O.D. x 3/16 I.D. | 1 |
| 9 | | 07C26344-CT | CLAMP, Fuel line | 2 |
| 10 | | 60D29906-CT | SENSOR, Throttle position | 1 |
| 11 | | NAS1149EN832P | WASHER, Flat – No.8 | 2 |
| 12 | | NAS1352C08H24 | SCREW, Cap #8-32 X 1.500 Long Drilled | 2 |



061AM, 064AC
Figure 18
Oil Level Gage and Engine Mounting Brackets

LUBRICATION SYSTEM
Figure 18 - Oil Level Gage and Engine Mounting Brackets

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|--------------------------------------|--------------------|
| 1 | | 70457 | GASKET, Oil filler extension | 1 |
| 2 | | 75675 | EXTENSION, Oil filler (2-3/16 long) | 1 |
| 3 | | 74065 | RING, Oil level gage seal | 1 |
| 4 | | LW-16783-34 | GAGE ASSEMBLY, Oil level | 1 |
| 5 | | 12A19770 | BRACKET, Engine mounting (dynafocal) | 4 |
| 6 | | STD-33 | WASHER, 3/8 plain | 16 |
| 7 | | STD-678 | WASHER, 3/8 lock, internal teeth | 16 |
| 8 | | STD-596 | NUT, 3/8-24 plain | 16 |

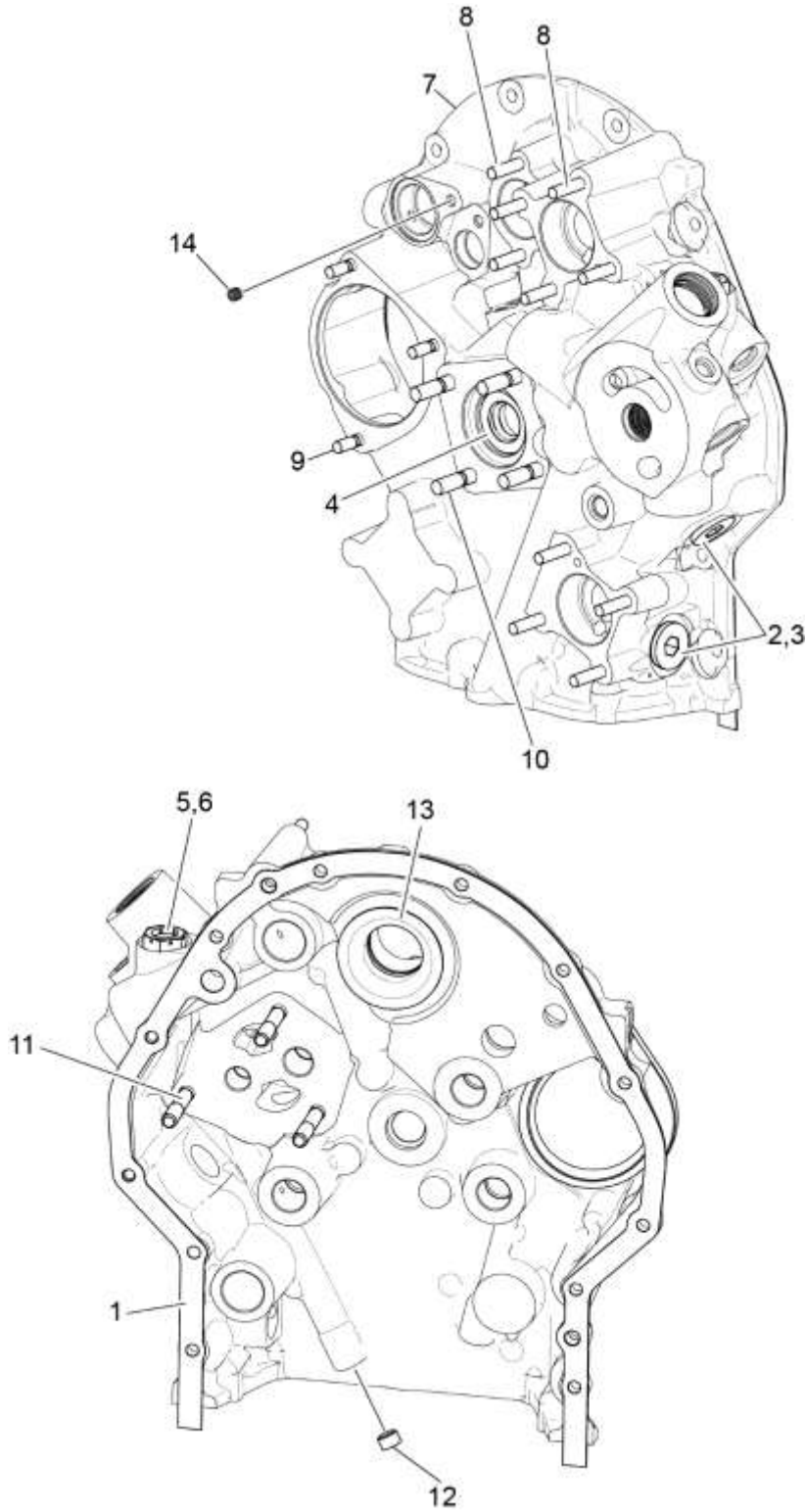


019BT
Figure 19
Oil Sump and Induction Housing Assembly

LUBRICATION SYSTEM
Figure 19 - Oil Sump and Induction Housing Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|---------------|--|--------------------|
| 1 | | 06B21326 | GASKET, Oil sump | 1 |
| 2 | | 56A26781-03 | HOUSING ASSEMBLY, Oil sump and induction | 1 |
| 3 | | 72179 | STUD, Intake pipe, extension pipe | 3 |
| 4 | | 72167 | PIPE, Extension, intake, cyl. No. 1 and 2 | 2 |
| 5 | | 72168 | PIPE, Extension, intake, cyl. No. 3 and 4 | 2 |
| 6 | | 72169 | PIPE, Extension, intake, cyl. No. 5 and 6 | 2 |
| 7 | | LW-11273 | CLAMP, Intake pipe extension | 3 |
| 8 | | 25C-9 | STUD, 1/4-20 x 1-1/8 long | 4 |
| 9 | | 25C-11 | STUD, 1/4-20 x 1-3/8 long | 13 |
| 10 | | 38-17 | STUD, 3/8-16 x 2-1/8 long | 8 |
| 11 | | 1102 | PLUG, 1/8-27 NPT, allen head | 4 |
| 12 | | STD-91 | PLUG, 1/2-14 NPT, allen head | 1 |
| 13 | | STD-784 | PLUG, 3/8-18 NPT, allen head | 1 |
| 14 | | STD-8 | WASHER, 1/4 plain | 29 |
| 15 | | STD-160 | WASHER, 1/4 lock, internal teeth | 13 |
| 16 | | STD-1411 | NUT, 1/4-20 plain | 13 |
| 17 | | LW-25-2.00 | BOLT, 1/4-20 x 2.00 long, hex. head | 2 |
| 18 | | LW-25-1.00 | BOLT, 1/4-20 x 1.00 long, hex. head | 6 |
| 19 | | 06E19769-0.91 | GASKET, Annular, 29/32 I.D. | 1 |
| 20 | | 72960 | PLUG, 7/8-14 x 5/8, hex. head | 1 |
| 21 | | LW-25H0.63 | BOLT, 1/4-20 x 5/8 long, hex. head | 6 |
| 22 | | AN970-4 | WASHER, Flat, 17/64 I.D. x 1-1/8 O.D. x 1/16 | 6 |
| 23 | | 56G28031 | BAFFLE, Oil sump | 1 |
| 24 | | 25C-12 | STUD, 1/4-20 x 1-1/2 long | 2 |
| 25 | | LW-25-0.81 | BOLT, 1/4-20 x 13/16 long, hex. head | 4 |
| 26 | | STD-8 | WASHER, 1/4 plain | 33 |
| 27 | | STD-160 | WASHER, 1/4 lock, internal teeth | 27 |
| 28 | | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. head | 6 |
| 29 | | LW-25-1.00 | BOLT, 1/4-20 x 1.00 long, hex. head | 6 |
| 30* | | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. head | 4 |
| 31 | | STD-1411 | NUT, 1/4-20 plain | 21 |
| 32 | | LW-13807 | ADAPTER ASSEMBLY, Fuel drain valve | 1 |
| 33 | | STD-551 | PLUG, 1/2-14 NPT, square head, drilled | 2 |

* LW-25-1.25 bolts installed in 4 locations, designated "A" in Figure 18



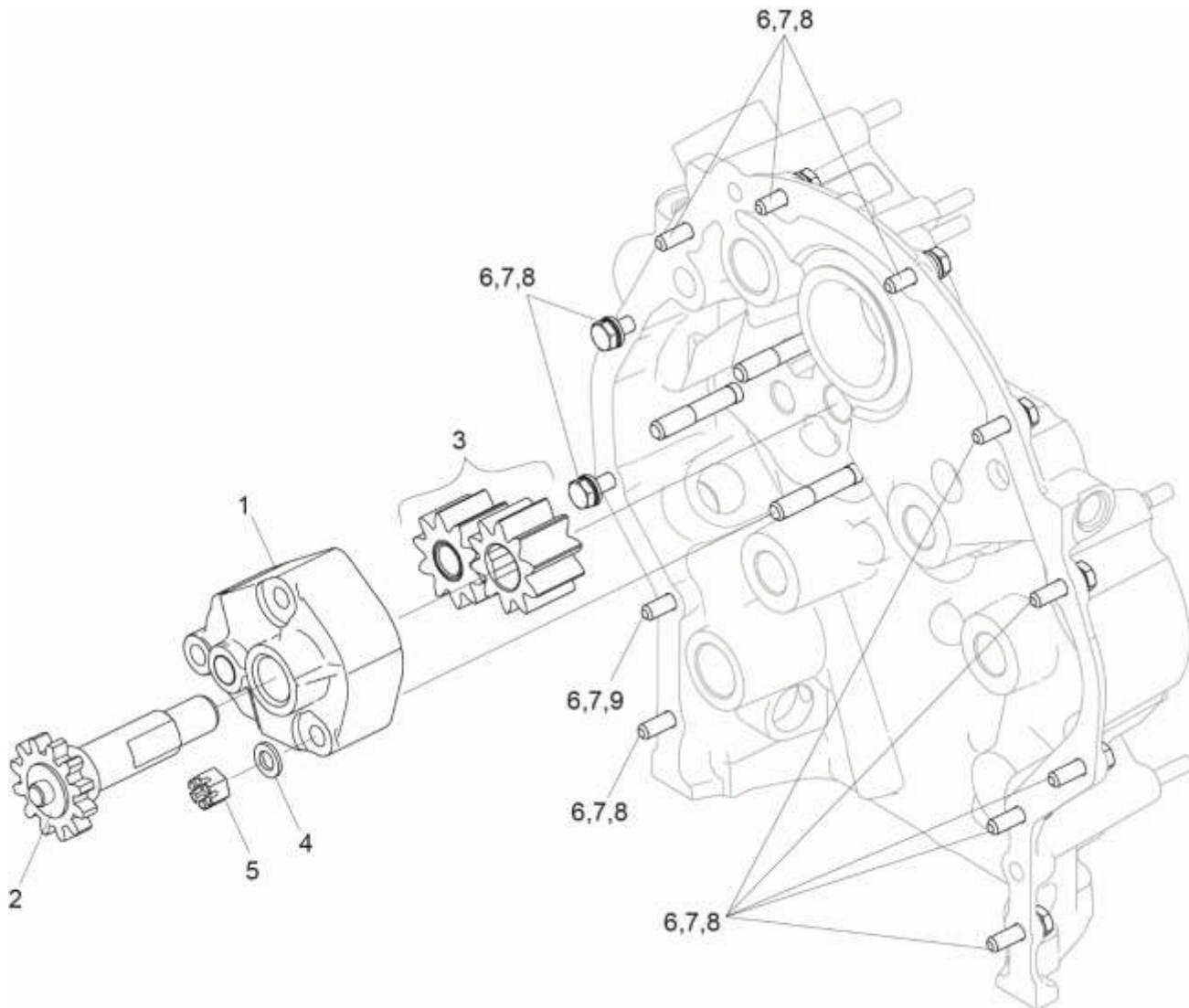
012BN

Figure 20

Accessory Housing Assembly

ACCESSORY DRIVES
Figure 20 - Accessory Housing Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|--|--------------------|
| 1 | | 06B26276 | GASKET, Accessory housing | 1 |
| 2 | | 03C21720 | PLUG, 7/8-14 thread | 2 |
| 3 | | MS29512-10 | SEAL, Oil, 3/32 section x 45/64 I.D. | 2 |
| 4 | | 06A26277 | SEAL, Fuel pump, 3/4 I.D. x 1-3/8 O.D. | 1 |
| 5 | | AN814-6L | PLUG, 9/16-18 hex. head | 1 |
| 6 | | MS29512-06 | O-RING, 15/32 I.D. x 5/64 section | 1 |
| 7 | | 21H26254-01 | ACCESSORY HOUSING, Studding | 1 |
| 8 | | 25C-12 | STUD, 1/4-20 x 1-1/2 long | 10 |
| 9 | | 25C-10 | STUD, 1/4-20 x 1-1/4 long | 3 |
| 10 | | 31C-14 | STUD, 5/16-18 x 1-3/4 long | 4 |
| 11 | | 31CD-20 | STUD, 5/16-18 x 2-1/2 long, drilled | 3 |
| 12 | | 1102 | PLUG, 1/8-27 NPT, Allen head | 1 |
| 13 | | 76156 | SHIELD, Oil accessory breather | 1 |
| 14 | | STD-1173 | INSERT, 1/4-20 UNC x 1/2 long | 1 |

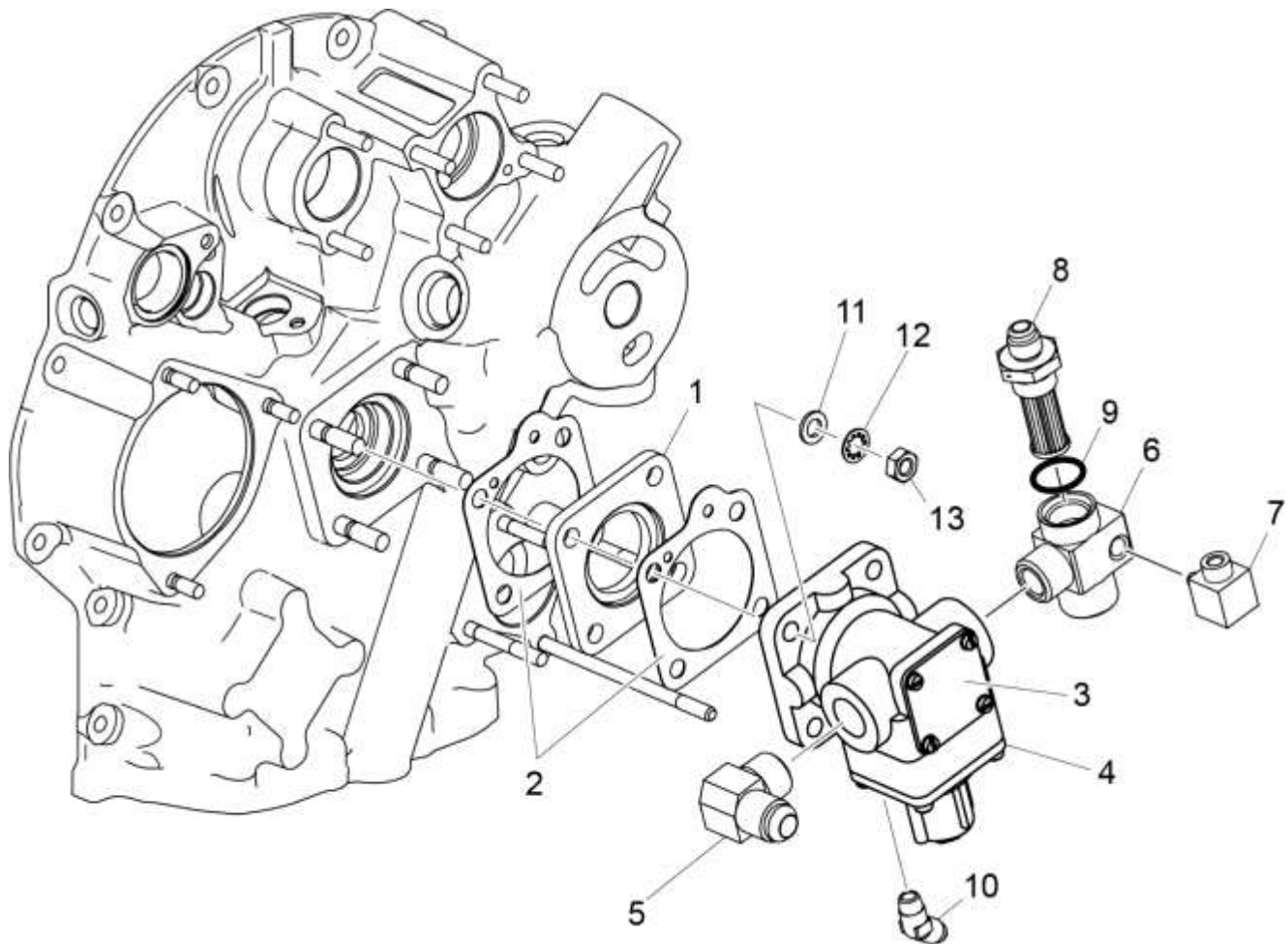


013J
Figure 21
Oil Pump Assembly and Accessory Housing Attaching Parts

ACCESSORY DRIVES

Figure 21 - Oil Pump Assembly and Accessory Housing Attaching Parts

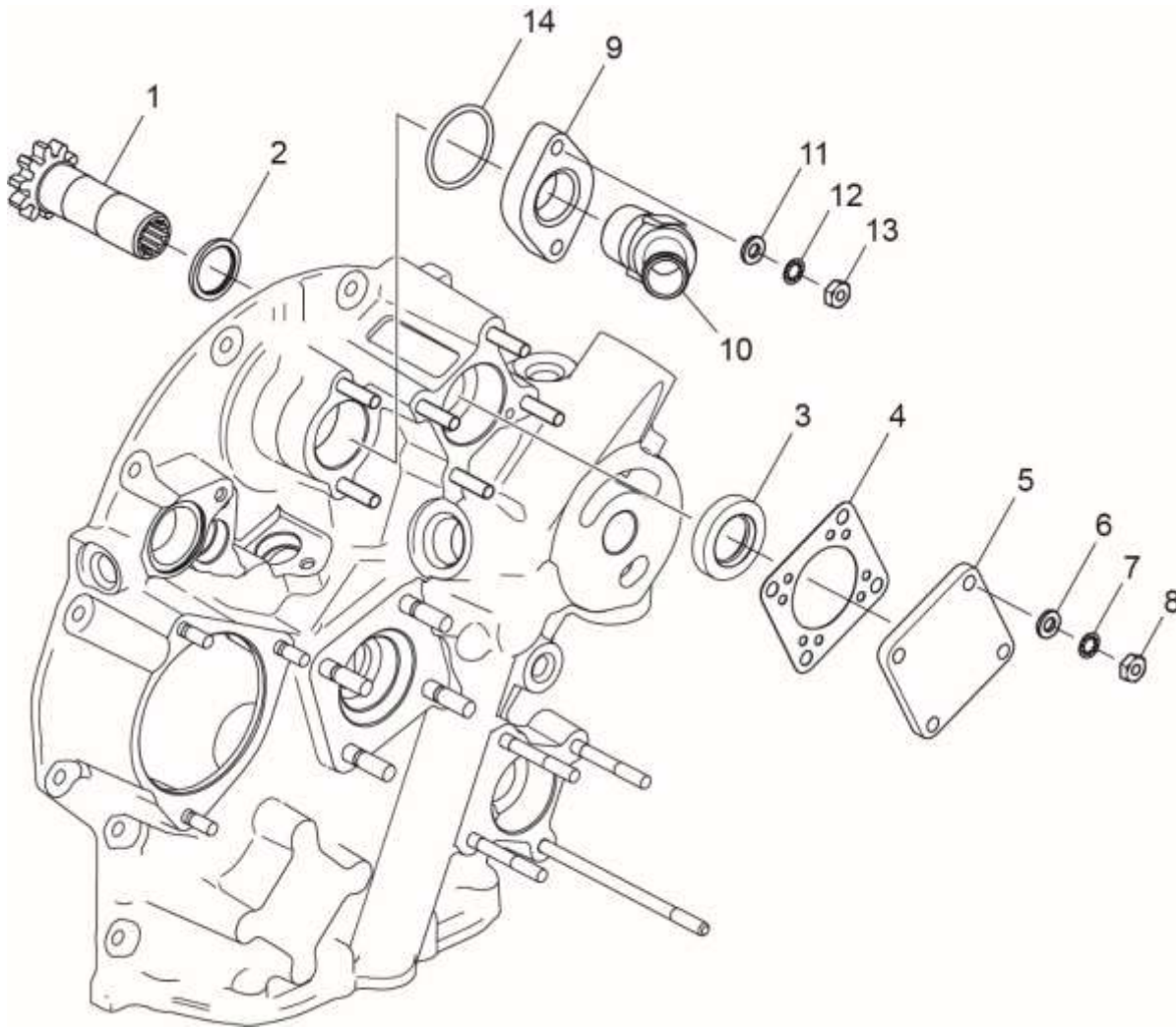
| Figure Item | Code | Part Number | Description | Units per Assembly |
|--|------|-------------|--------------------------------------|--------------------|
| 1 | | 51A29876 | BODY ASSEMBLY, Oil pump | 1 |
| | | LW-10344 | BODY ASSEMBLY, Oil pump | 1 |
| 2 | | LW-10318 | GEAR ASSEMBLY, Oil pump drive | 1 |
| 3 | | 05K23463 | IMPELLER KIT | 1 |
| | * | 51C23290 | IMPELLER ASSEMBLY, Oil pump driven | 1 |
| | * | 51B23274 | IMPELLER, Oil pump driving | 1 |
| 4 | | STD-35 | WASHER, 5/16 plain | 3 |
| 5 | | STD-1420 | NUT, 5/16-18 slotted | 3 |
| 6 | | STD-8 | WASHER, 1/4 plain | 12 |
| 7 | | STD-160 | WASHER, 1/4 lock, internal teeth | 12 |
| 8 | | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. head | 11 |
| 9 | | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. head | 1 |
| * Sold in complete sets only (Kit P/N 05K23463). | | | | |



035BA
Figure 22
Fuel Pump Assembly and Attaching Parts

ACCESSORY DRIVES
Figure 22 - Fuel Pump Assembly and Attaching Parts

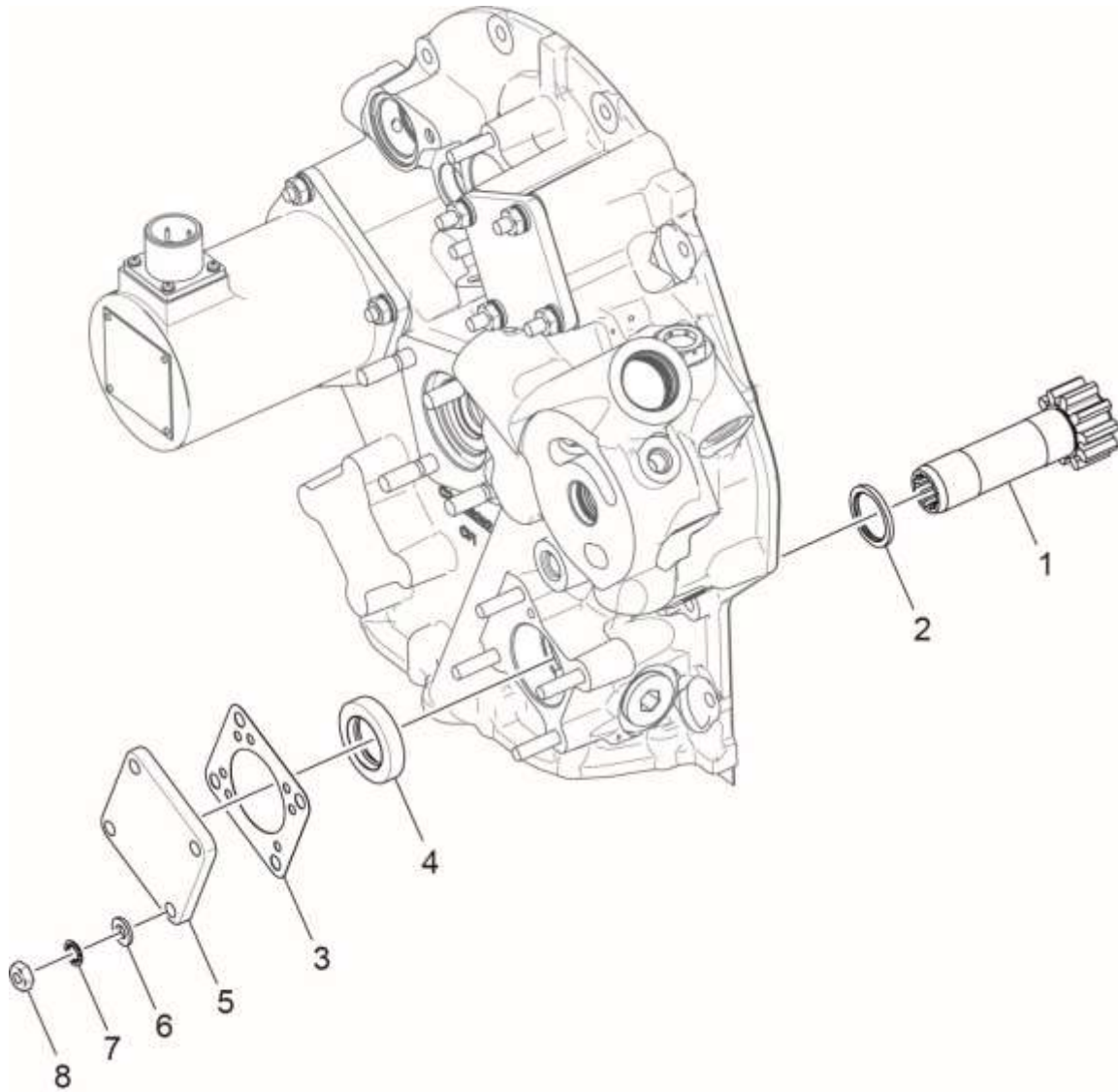
| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|----------|--------------|--|--------------------|
| 1 | | LW-10799 | SPACER, Fuel pump, insulating | 1 |
| 2 | | 69164 | GASKET, Fuel pump adapter | 2 |
| 3 | | 62F26562 | ASSEMBLY, Fuel pump | 1 |
| 4 | V | 62E23191 | FUEL PUMP (V 200F-5007) | 1 |
| 5 | | LW-11882 | ELBOW, 90° inlet | 1 |
| 6 | | 02E26278 | ADAPTER, Fuel filter and pressure sensor | 1 |
| 7 | | LW-11867 | ELBOW, 1/8 NPT, intake and exhaust, 90° | 1 |
| 8 | | 61U26301 | FILTER, Fuel pump | 1 |
| 9 | | M25988/1-016 | O-RING, Fluorosilicone, 39/64 ID X 1/16 | 1 |
| 10 | | MS20823-4 | ELBOW, 1/8 NPT to 1/4 tube | 1 |
| 11 | | STD-35 | WASHER, 5/16 plain | 4 |
| 12 | | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 13 | | STD-1410 | NUT, 5/16-18 plain | 4 |
| V Vendor Prime Manufacturer part | | | | |



016P, 014BZ
Figure 23
Vacuum Pump Drive and Breather Fitting

ACCESSORY DRIVES
Figure 23 - Vacuum Pump Drive and Breather Fitting

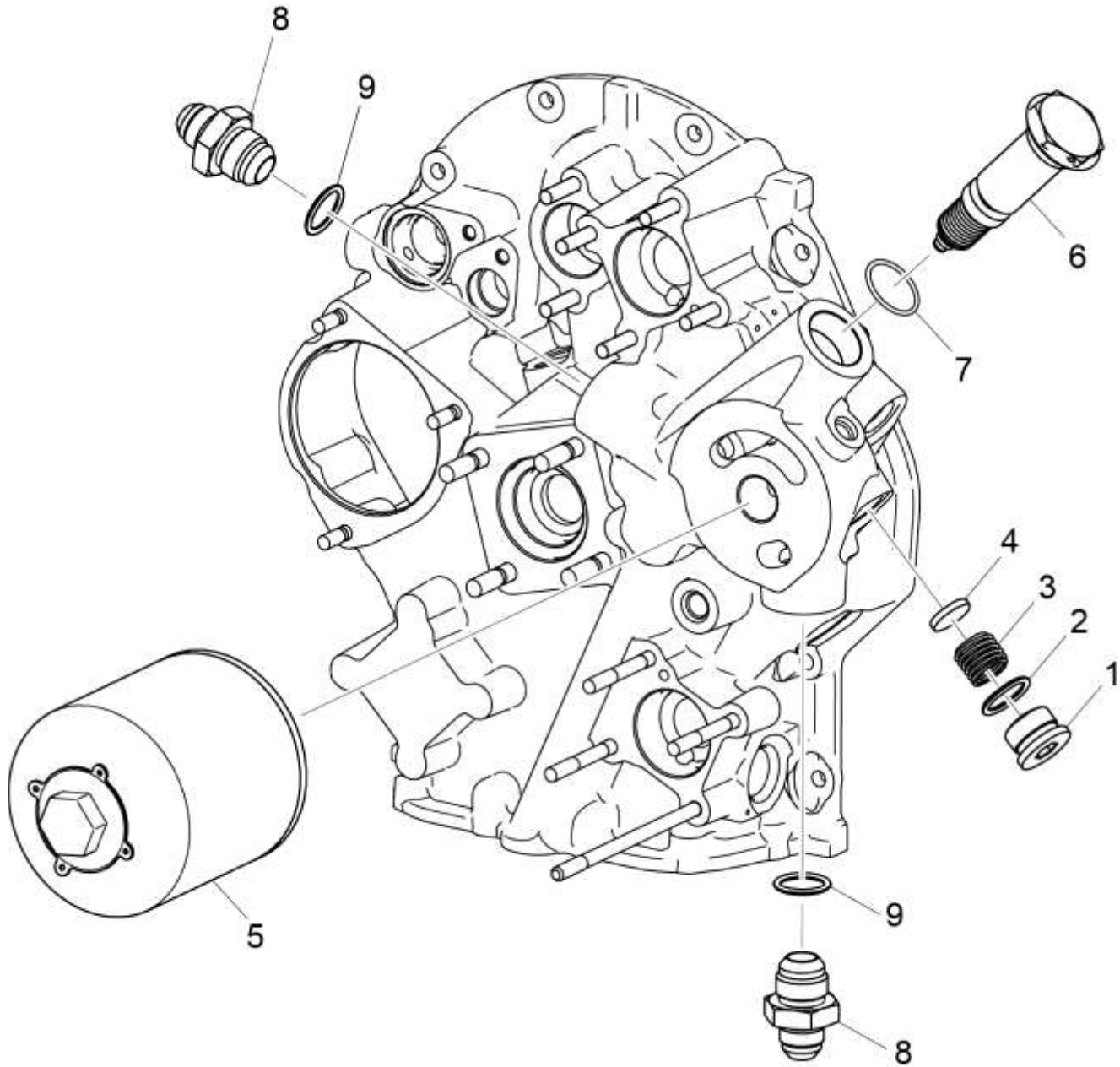
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|---|--------------------|
| 1 | | LW-10307 | GEAR ASSEMBLY, Accessory driven | 1 |
| 2 | | 71596 | WASHER, Accessory drive gear | 1 |
| 3 | | 06A19956 | OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 wide | 1 |
| 4 | | 8313 | GASKET, Vacuum pump | 1 |
| 5 | | 60430 | COVER, Vacuum pump | 1 |
| 6 | | STD-8 | WASHER, 1/4 plain | 4 |
| 7 | | STD-160 | WASHER, 1/4 lock, internal teeth | 4 |
| 8 | | STD-1411 | NUT, 1/4-20 plain | 4 |
| 9 | | 03D26282 | COVER, Breather | 1 |
| 10 | | AN844-12D | ELBOW, 3/4 NPT to 3/4 I.D. hose | 1 |
| 11 | | STD-8 | WASHER, 1/4 plain | 2 |
| 12 | | STD-160 | WASHER, 1/4 lock, internal teeth | 2 |
| 13 | | STD-1411 | NUT, 1/4-20 plain | 2 |
| 14 | | MS28775-126 | O-RING | 1 |



017AB
Figure 24
High Speed Drive

ACCESSORY DRIVES
Figure 24 - High Speed Drive

| Figure Item | Code | Part Number | Description | Units per Assembly |
|--------------------|-------------|--------------------|---|---------------------------|
| 1 | | LW-16448 | GEAR ASSEMBLY, Accessory driven | 1 |
| 2 | | 71596 | WASHER, Accessory drive gear | 1 |
| 3 | | 8313 | GASKET, Vacuum pump | 1 |
| 4 | | 06A19956 | OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 wide | 1 |
| 5 | | 60430 | COVER, Vacuum pump | 1 |
| 6 | | STD-8 | WASHER, 1/4 plain | 4 |
| 7 | | STD-160 | WASHER, 1/4 lock, internal teeth | 4 |
| 8 | | STD-1411 | NUT, 1/4-20 plain | 4 |



015AE

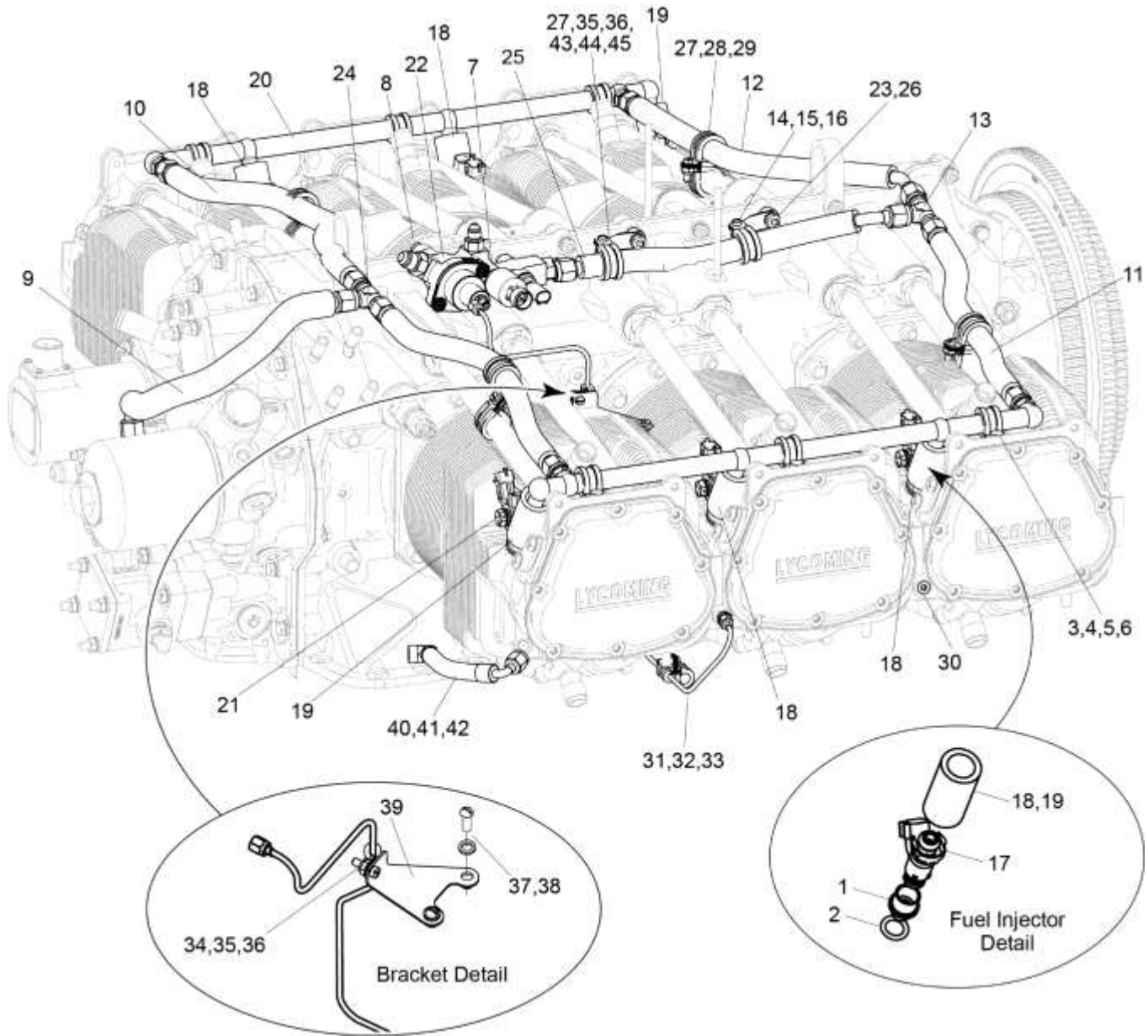
Figure 25

Oil Filter Assembly and Oil Cooler Bypass Valve

ACCESSORY DRIVES

Figure 25 - Oil Filter Assembly and Oil Cooler Bypass Valve

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|-----------|-------------|--|--------------------|
| 1 | | 03C21720 | PLUG, 7/8-14 thread | 1 |
| 2 | | MS29512-10 | SEAL, Oil, 3/32 section x 45/64 | 1 |
| 3 | | 55C26775 | SPRING | 1 |
| 4 | | 55H26776 | VALVE | 1 |
| 5 | V* | LW-13216 | OIL FILTER, Long, V CH48111-1 | 1 |
| 6 | ♣ | 53E29909 | VALVE ASSEMBLY, Temp. control, oil cooler bypass | 1 |
| | ♣ | 53E22144 | VALVE ASSEMBLY, Temp. control, oil cooler bypass | 1 |
| 7 | | 76510 | GASKET, Oil Cooler By-Pass Valve | 1 |
| 8 | | AN919-15 | REDUCER, External, 5/8 flared tube to 1/2 | 2 |
| 9 | | MS29512-10 | SEAL, Oil, 3/32 section x 45/64 | 2 |
| <p>V Vendor Prime Manufacturer part * Shipped loose with engine. ♣ Refer to the latest revision of Service Instruction No. 1585 to install the correct Bypass Valve Assembly for optimum oil temperature</p> | | | | |



040DG, 062H

Figure 26

Fuel Injector, Fuel Lines, Manifold Assembly, and Pressure Line

FUEL DISTRIBUTION
Figure 26 - Fuel Injector, Fuel Lines, Manifold Assembly, and Pressure Line

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|----------------|--|--------------------|
| 1 | | 02E29797 | ADAPTER, Fuel injector | 6 |
| 2 | | 06E19769-0.50 | GASKET, Annular, 1/2 I.D. | 6 |
| 3 | | LW-16266-25-63 | CLAMP, 5/8 I.D. x 1/4 diameter screw | 6 |
| 4 | | STD-160 | WASHER, 1/4 lock, internal teeth | 6 |
| 5 | | STD-8 | WASHER, 1/4 plain | 6 |
| 6 | | LW-25-0.63 | BOLT, 1/4-20 x 5/8 long, hex. head | 6 |
| 7 | | LW-25-2.00 | BOLT, 1/4-20 x 2.00 long, hex. head | 1 |
| 8 | | LW-25-1.63 | BOLT, 1/4-20 x 1-5/8 long, hex. head | 1 |
| 9 | | LW-12877-6S110 | HOSE ASSEMBLY, 3/8 hose, 90° elbow | 1 |
| 10 | | LW-12799-6S180 | HOSE ASSEMBLY, 3/8 hose, straight | 1 |
| 11 | | LW-12799-6S110 | HOSE ASSEMBLY, 3/8 hose, straight | 2 |
| 12 | | LW-12879-6S162 | HOSE ASSEMBLY, 3/8 hose, 45° elbow | 1 |
| 13 | | AN824-6 | TEE, 3/8 flared tube | 2 |
| 14 | | LW-16266-10-75 | CLAMP | 1 |
| 15 | | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. head | 1 |
| 16 | | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 17 | | 61X26294-CT | FUEL INJECTOR (Obsolete) | 6 |
| | * | 61X29461-CT | FUEL INJECTOR (Replacement for P/N 61X26294-CT) | 6 |
| 18 | | 01M29868 | FIRE SLEEVE, Fuel injector (installed on fuel injectors for cylinders 1, 3, 4, and 6) | 4 |
| 19 | | 01M29869 | FIRE SLEEVE, Fuel injector (installed on fuel injectors for cylinders 2 and 5) | 2 |
| 20 | | 63P26360 | RAIL ASSEMBLY, Fuel injector | 2 |
| 21 | | LW-31-1.31 | BOLT, 5/16-18 x 1-5/16 long, hex. head | 6 |
| 22 | | 02K29101 | MANIFOLD ASSEMBLY, Fuel regulator adapter | 1 |
| 23 | | 74655 | SPACER, Exhaust manifold | 1 |
| 24 | | LW-25-1.88 | BOLT, 1/4-20 x 1-7/8 long, hex. head | 1 |
| 25 | | LW-12879-6S120 | HOSE ASSEMBLY, 3/8 hose, 45° elbow | 1 |
| 26 | | 72815 | BRACKET, Support clamp, 90° | 1 |

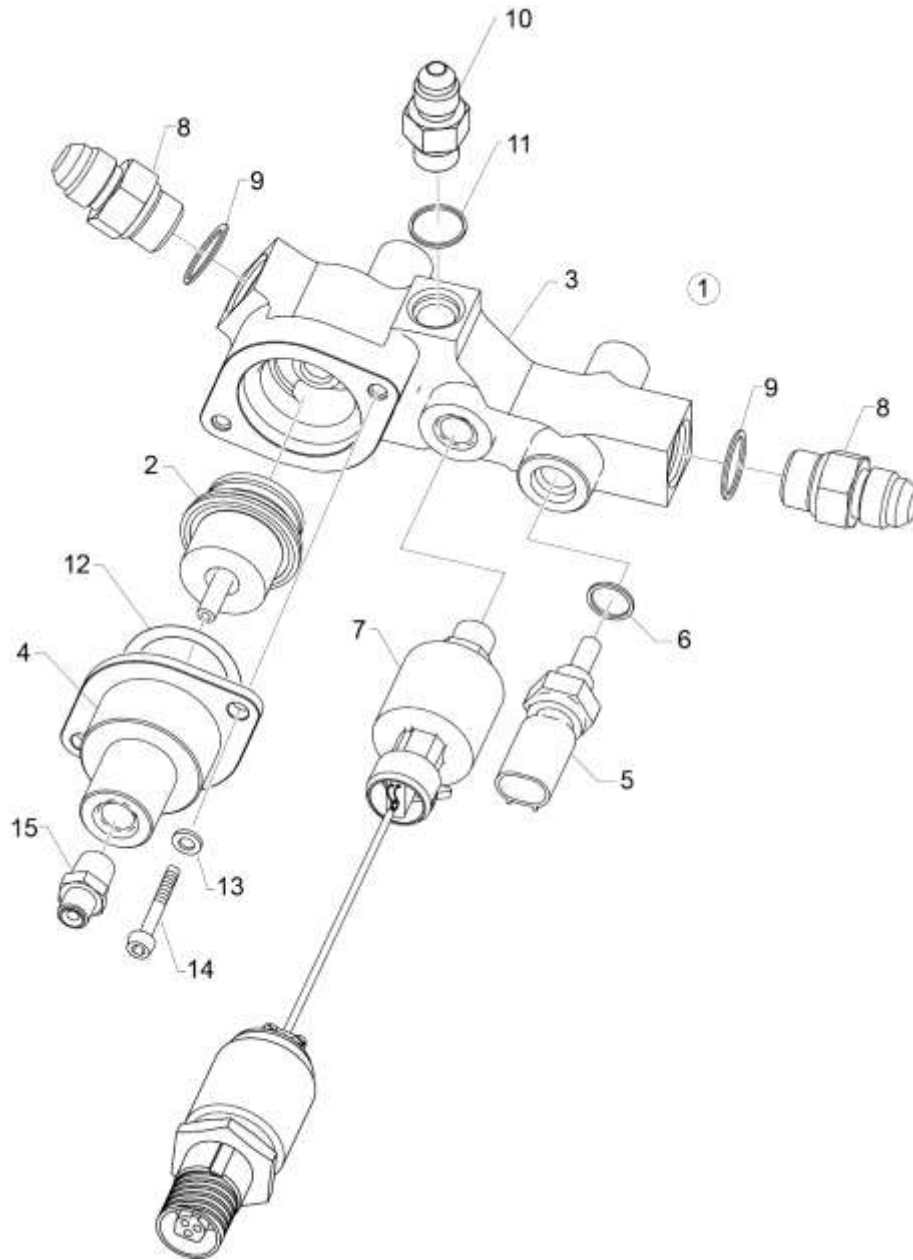
* Refer to the latest revisions of Service Instructions No. 1573 and No. 1582 when replacing fuel injectors part number 61X26294-CT with fuel injectors part number 61X29461-CT.

(continued on next page)

Figure 26 - Fuel Injector, Fuel Lines, Manifold Assembly, and Pressure Line (Cont.)

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|----------------|---|--------------------|
| 27 | | LW-16266-10-75 | CLAMP | 9 |
| 28 | | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. head | 1 |
| 29 | | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 30 | | 1102 | PLUG, 1/8-27 NPT, Allen head | 4 |
| 31 | | 02E26306 | NIPPLE, Restricted, 1/8 tube | 1 |
| 32 | | LW-12098-0-280 | TUBE ASSEMBLY, Fuel injector line | 1 |
| 33 | | LW-16266-10-38 | CLAMP, 3/8 diameter for No. 10 screw | 1 |
| 34 | | LW-16266-10-13 | CLAMP, 1/8 diameter for No. 10 screw | 2 |
| 35 | | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. head | 5 |
| 36 | | STD-670 | LOCK NUT, No. 10-32 | 5 |
| 37 | | STD-692 | SCREW, No. 10-32 x 1/2 long, round head | 2 |
| 38 | | STD-425 | WASHER, No. 10 plain | 2 |
| 39 | | 07A28507 | BRACKET ASSEMBLY, Fuel line support | 1 |
| 40 | | MS20823-4 | ELBOW, 1/8 NPT to 1/4 tube | 1 |
| 41 | | LW-12798-4S130 | HOSE ASSEMBLY, 1/4 hose, straight | 1 |
| 42 | | 02A19417-CT | ELBOW, 1/4 tube x 1/4 NPT, 90° | 1 |
| 43 | | STD-425 | WASHER, No. 10 plain | 1 |
| 44 | | 77410 | BRACKET, 90° | 1 |
| 45 | | STD-8 | WASHER, 1/4 plain | 2 |

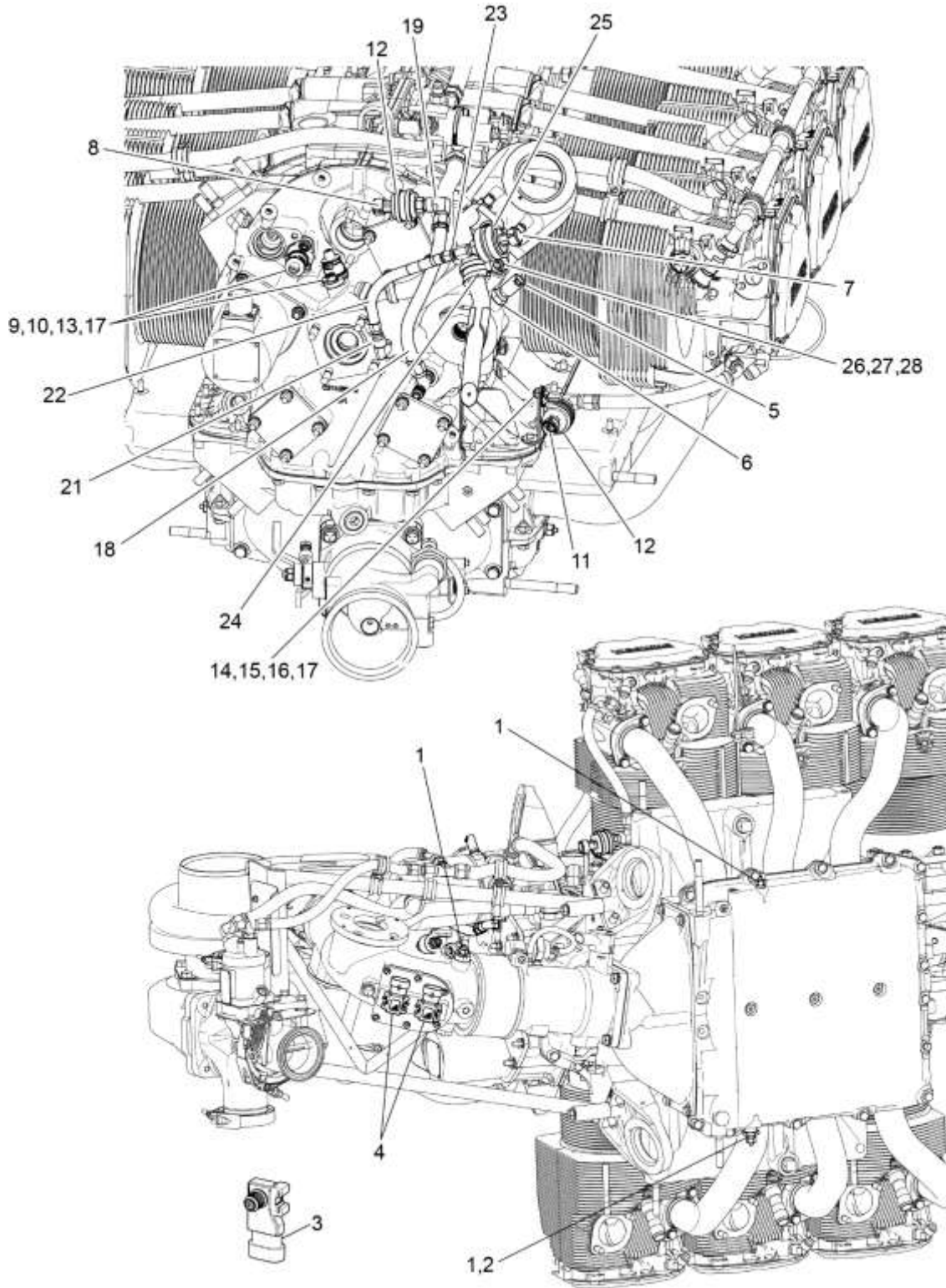
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040DG
Figure 27
Fuel Pressure Regulator

FUEL CONTROL SYSTEM
Figure 27 – Fuel Pressure Regulator

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|---------------|---|--------------------|
| 1 | | 02K29101 | ASSEMBLY, regulator | |
| 2 | | 60K29867-CT | REGULATOR, Fuel pressure | 1 |
| 3 | | 02K26662 | MANIFOLD, Fuel pressure regulator | 1 |
| 4 | | 02E26641 | ADAPTER, Fuel pressure regulator | 1 |
| 5 | | 60C26310-CT | SENSOR, Temperature | 1 |
| 6 | | AS5729-012 | O RING, 3/8 ID X 1/16 SECT | 1 |
| | * | AS3209-012 | O RING, 3/8 ID X 1/16 SECT | 1 |
| 7 | | 60E29660 | SENSOR, Fuel pressure, with lead and connector | 1 |
| 8 | | 75739-CT | NIPPLE, 3/8 tube, 9/16-18 UNF-2A thread | 2 |
| 9 | | MS29512-06 | O-RING, 15/32 ID X 1/16 SECT-. | |
| 10 | | LW-16572 | NIPPLE, 1/4 tube, 7/16-20 UNF-2A thread | 1 |
| 11 | | MS29512-04 | O-RING, 11/32 ID X 1/16 SECT-. | |
| 12 | | MS29513-028 | O-RING, Fuel resistant, 1-23/64 I.D. x 1/16 thick | 1 |
| 13 | | NAS1149E0332P | WASHER, No. 10, flat, 1/32 thick | 2 |
| 14 | | NAS1352C3H10 | SCREW, No. 10-64 x 5/8 long, drilled head | 2 |
| 15 | | STD-148 | NIPPLE, 1/8 tube, union | 1 |
| * P/N AS3209-012 is an approved alternate to P/N AS5729-012 | | | | |

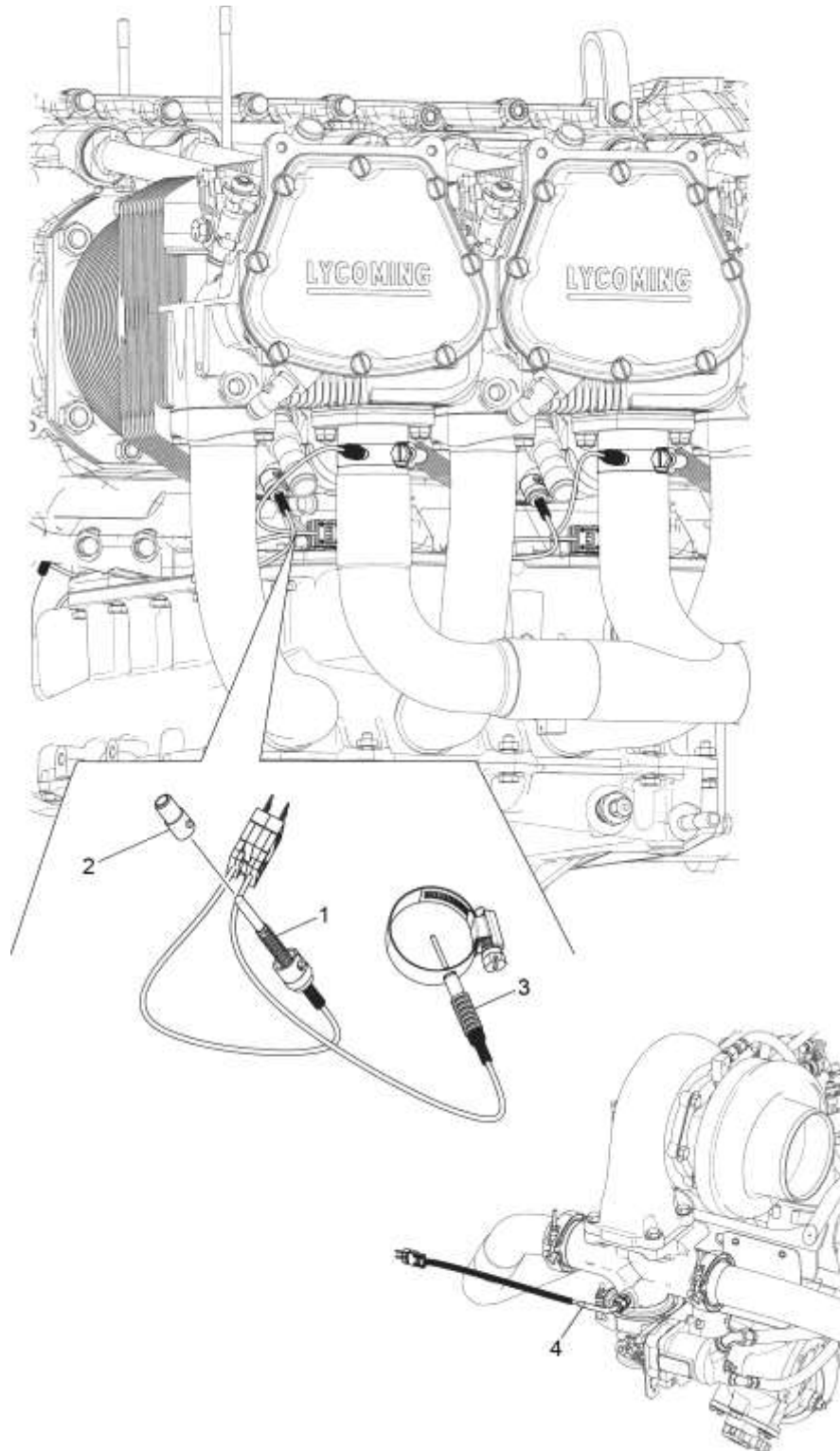


150H
Figure 28
Sensors (Accessory Housing View)

IGNITION DISTRIBUTION
Figure 28 - Sensors (Accessory Housing View)

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|------------------|--|--------------------|
| 1 | | 60C28409 | SENSOR, Air temperature | 3 |
| 2 | | AN912-3D | BUSHING, Reducer, 3/8 NPT | 1 |
| 3 | * | 60E29474-CT | SENSOR, Pressure, 1 bar | 2 |
| 4 | | 60E29475-CT | SENSOR, Pressure, 2 bar | 2 |
| 5 | | 60C26310-CT | SENSOR, Temperature | 1 |
| 6 | | AS5729-012 | O RING, 3/8 ID X 1/16 SECT- | 1 |
| 7 | | 60E29660 | SENSOR, Fuel pressure, with lead and connector | 1 |
| 8 | | 60E29661 | SENSOR, Oil pressure, with lead and connector | 1 |
| 9 | | 60D26318-CT | SENSOR, Cam and crank | 2 |
| 10 | | AS3209-017 | O-RING, 0.667- 0.685 I.D. | 2 |
| 11 | | 60E29662 | SENSOR, Air pressure, with lead and connector | 1 |
| 12 | | LW-16266-25-1.00 | CLAMP, 1.00 diameter for 1/4 screw | 2 |
| 13 | | NAS1352C4H10 | SCREW, Socket head cap, 1/4-20 x 5/8 long, corrosion resistant, drilled head | 2 |
| 14 | | STD-692 | SCREW, No. 10-32 x 1/2 long, round head | 1 |
| 15 | | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 16 | | 07A28331 | BRACKET, Extension | 1 |
| 17 | | STD-8 | WASHER, 1/4 plain | 2 |
| 18 | | LW-12798-4S074 | HOSE ASSEMBLY, 1/4 hose, straight | 1 |
| 19 | | 02A19417-CT | ELBOW, 1/4 tube x 1/8 NPT, 90° | 1 |
| 20 | | STD-425 | WASHER, No. 10 plain | 1 |
| 21 | | AN816-4 | NIPPLE, 1/8 NPT to 1/4 tube | 1 |
| 22 | | LW-12798-4S044 | HOSE ASSEMBLY, 1/4 hose, straight | 1 |
| 23 | | 02A28863 | FITTING, Reducer, 1/2 male hose to 1/8 NPT female | 1 |
| 24 | | LW-16266-10-75 | CLAMP, 3/4 I.D. x No. 10 screw | 1 |
| 25 | | LW-16266-25-1.00 | CLAMP, 1.00 diameter for 1/4 screw | 1 |
| 26 | | STD-692 | SCREW, No. 10-32 x 1/2 long, round head | 1 |
| 27 | | STD-670 | LOCKNUT, No. 10-32 | 1 |
| 28 | | STD-425 | WASHER, No. 10 plain | 1 |

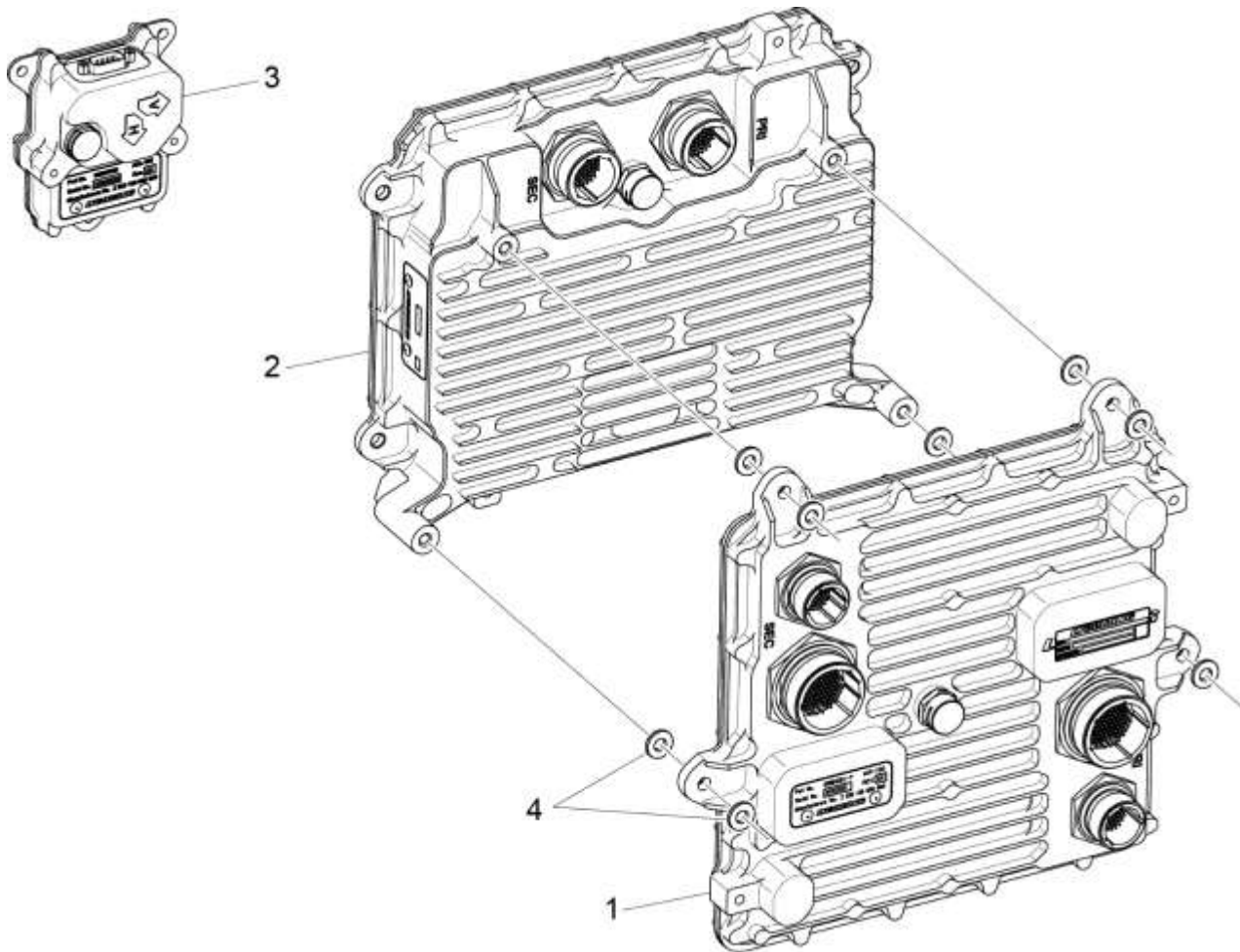
* Shipped loose with engine



150H
Figure 29
Sensors (Rear Left View)

IGNITION DISTRIBUTION
Figure 29 - Sensors (Rear Left View)

| Figure Item | Code | Part Number | Description | Units per Assembly |
|--------------------|-------------|--------------------|--|---------------------------|
| 1 | | 60C26313 | SENSOR, Cylinder head temperature (same on all cylinders) | 6 |
| 2 | | AN4076-1 | FITTING, Temperature measuring element | 6 |
| 3 | | 60C26314 | SENSOR, Exhaust gas temperature | 6 |
| 4 | | 60C26763 | SENSOR, Turbine inlet temperature | 1 |



170D
Figure 30
Engine Control Unit, Power Box, and Data Logger

IGNITION DISTRIBUTION
Figure 30 - Engine Control Unit, Power Box, and Data Logger

| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|-------------|--|--------------------|
| 1 | * ♦ | 60B29705 | ECU ASSEMBLY, Tecnam | 1 |
| | * ♦ | 60B29659 | ECU ASSEMBLY, Tecnam | 1 |
| | * ♦ | 60B29726 | ECU ASSEMBLY, Tecnam | 1 |
| 2 | * | 60B26322 | POWER BOX | 1 |
| 3 | * | 60B29079 | DLU ASSEMBLY FOR IE2 (DATA LOGGER) (Replaced by 60B29462) | 1 |
| | * | 60B29462 | DLU ASSEMBLY FOR IE2 (DATA LOGGER) | 1 |
| 4 | | 01L29970 | WASHER, Insulating, ECU Mounting | 8 |
| <p>* Shipped loose with engine ♦ Refer to the latest revision of Service Instruction No. 1573 for ECU Part Numbers, Solenoid Valve Part Numbers, Fuel Injector Part Numbers, and Calibration Tables that must be used together</p> | | | | |

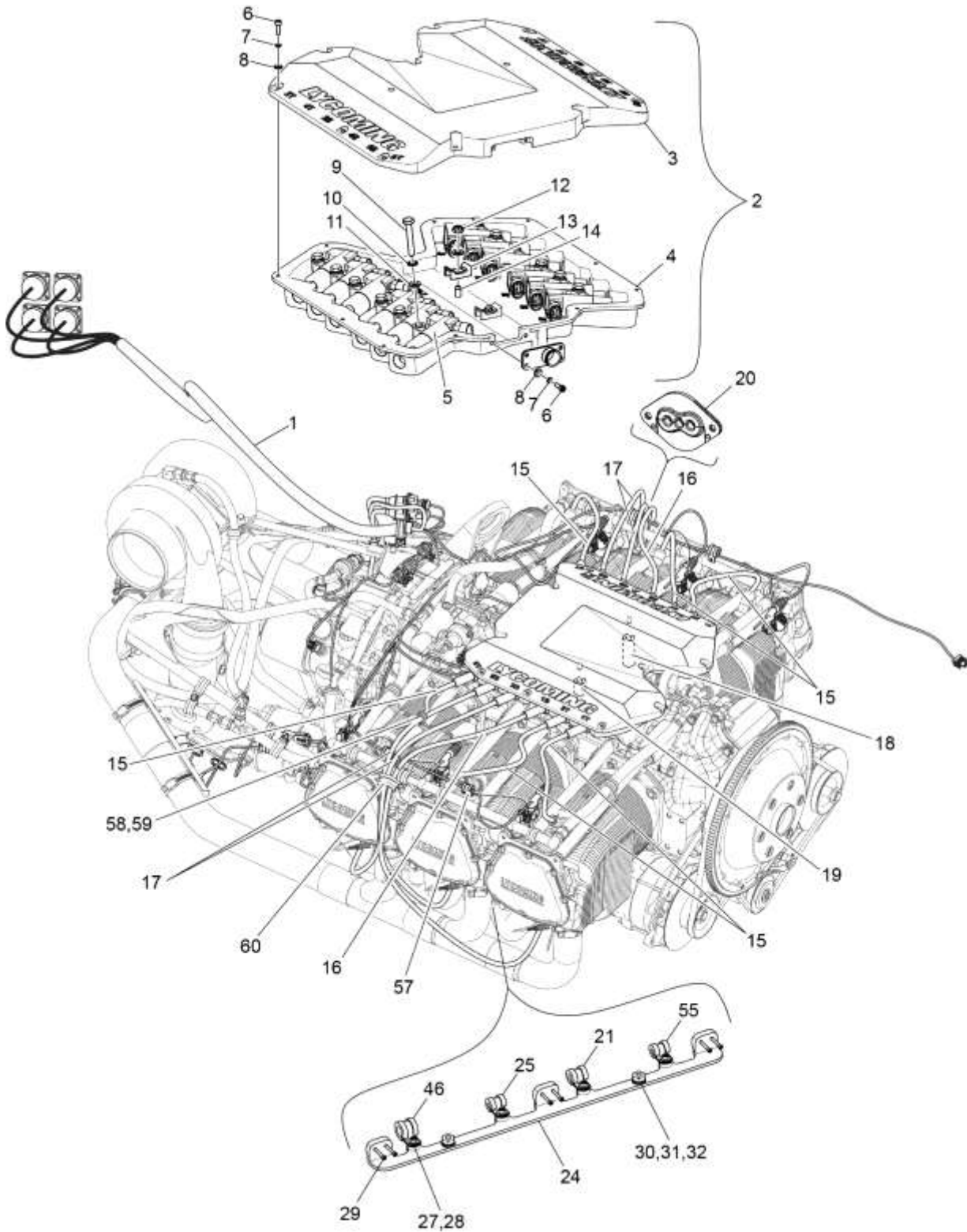
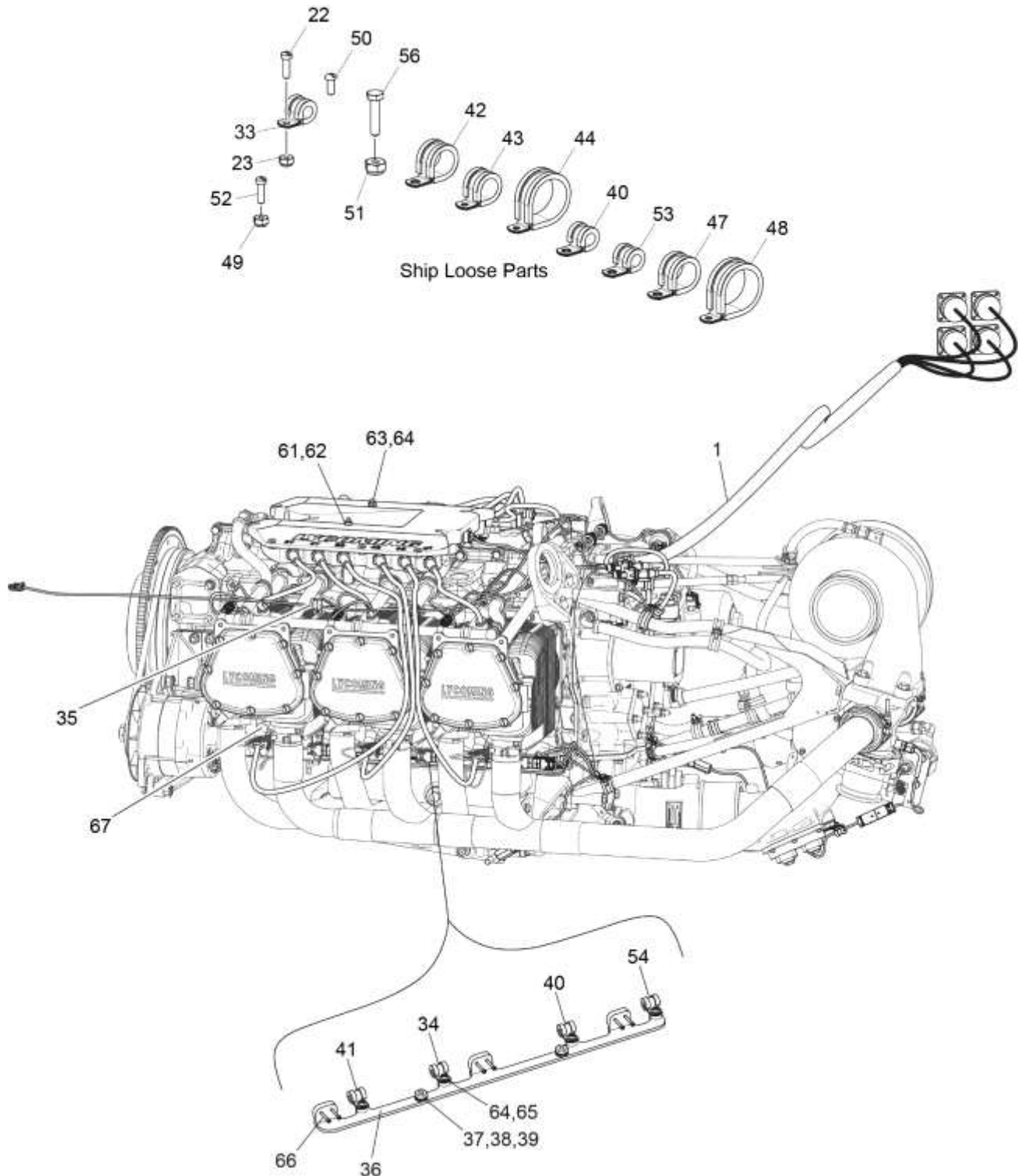


Figure 31A
EEC Harness, Coil Box, and Spark Plugs (Right Side)



160K
Figure 31B
EEC Harness, Coil Box, and Spark Plugs (Top Left Front)

IGNITION DISTRIBUTION
Figure 31A, B - EEC Harness, Coil Box, and Spark Plugs

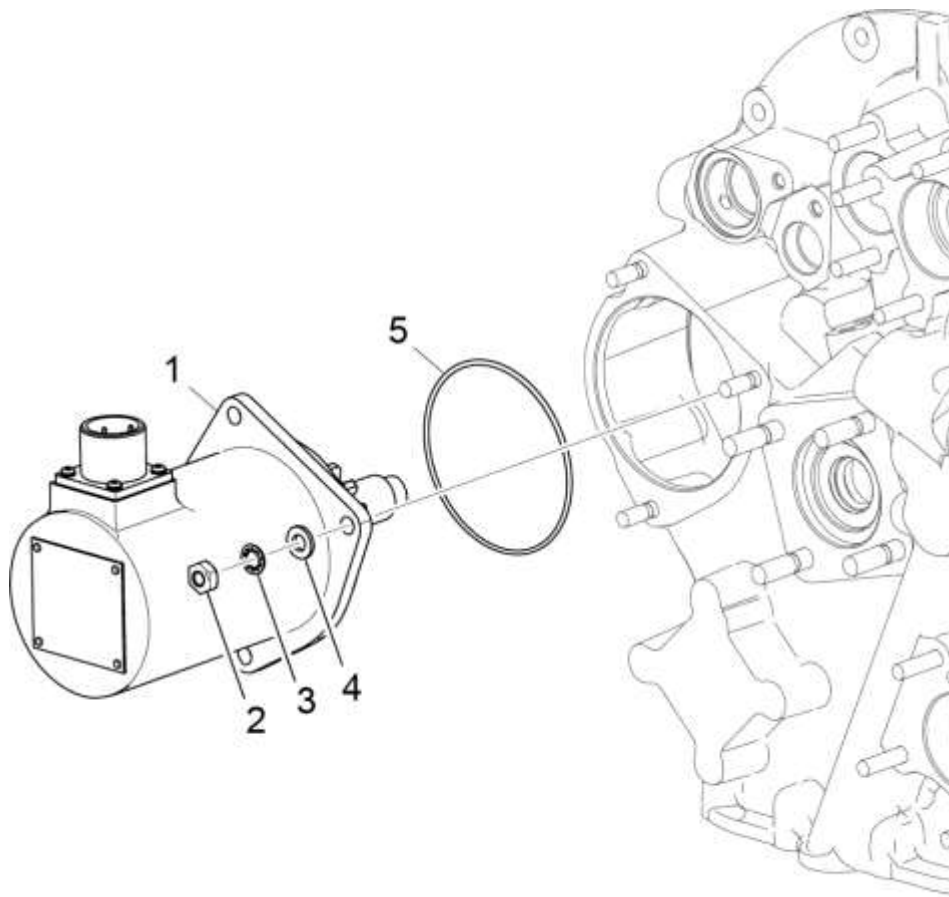
| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|----------------|--|--------------------|
| 1 | | 60A29063 | WIRING HARNESS | 1 |
| 2 | | 60B28333 | COIL BOX ASSEMBLY | 1 |
| 3 | | 60B26779 | COIL BOX, Lid, 6 cylinder | 1 |
| 4 | | 60B26778 | COIL BOX, Base | 1 |
| 5 | | 60B26349 | IGNITION COIL ASSEMBLY | 12 |
| 6 | | NAS1352-08-8 | SCREW, Socket head cap, 8-32 x 1/2 long | 15 |
| 7 | | STD-250 | WASHER, No. 8, spring lock | 15 |
| 8 | | STD-249 | WASHER, No. 8 plain | 15 |
| 9 | | LW-25-1.63 | BOLT, 1/4-20 x 1-5/8 long, hex. head | 12 |
| 10 | | STD-160 | WASHER, 1/4 lock, internal teeth | 12 |
| 11 | | STD-8 | WASHER, 1/4 plain | 14 |
| 12 | | STD-2079 | NUT, 1/4-20 UNC | 2 |
| | | 01B31661-251 | LOCKNUT-Prevailing torque, 1/4-20 UNC-2B, Thin | 2 |
| 13 | | STD-2254 | MOUNT, Cable Tie | 2 |
| 14 | | NASM24693-S95 | SCREW, Flat countersunk head 1/4-20 x 5/8 | 2 |
| 15 | | 67W26289-101 | LEAD, High tension spark plug, CH1K012-DS-1 | 6 |
| 16 | | 67W26289-330 | LEAD, High tension spark plug | 2 |
| 17 | | 67W26289-250 | LEAD, High tension spark plug CH1K012-DS-2 | 4 |
| 18 | | 01L26374 | SPACER, Coil box | 1 |
| 19 | | 01L26373 | SPACER, Coil box | 1 |
| 20 | * | LW-M-2376 | PLATES, Spark plug cable, 3 wire | 2 |
| 21 | | LW-16266-10-31 | CLAMP, 5/16 diameter for No. 10 screw | 1 |
| 22 | * | STD-860 | SCREW, No. 10-32 x 5/8 long | 1 |
| 23 | * | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 24 | | 07A28334 | BRACKET, Wire harness, right hand | 1 |
| 25 | | LW-16266-10-25 | CLAMP, 1/4 I.D. for No. 10 screw, cushion | 2 |
| 26 | | LW-16266-10-31 | CLAMP, 5/16 diameter for No. 10 screw | 1 |
| 27 | | STD-243 | WASHER, No. 6 plain | 3 |
| 28 | | NAS1352-06-6 | SCREW, Socket head cap, 6-32 x 3/8 long | 3 |
| 29 | | NAS1352-03-14 | SCREW, Socket head cap, 3-48 x 7/8 long | 6 |
| 30 | | STD-8 | WASHER, 1/4 plain | 2 |
| 31 | | STD-160 | WASHER, 1/4 lock, internal teeth | 2 |
| 32 | | STD-1411 | NUT, 1/4-20 plain | 2 |
| 33 | | LW-16266-10-25 | CLAMP, 1/4 I.D. for No. 10 screw, cushion | 1 |
| 34 | | LW-16266-10-38 | CLAMP, 3/8 dia. for No. 10 screw | 1 |

* Shipped loose with engine

(continued on next page)

Figure 31A, B - EEC Harness, Coil Box, and Spark Plugs (Cont.)

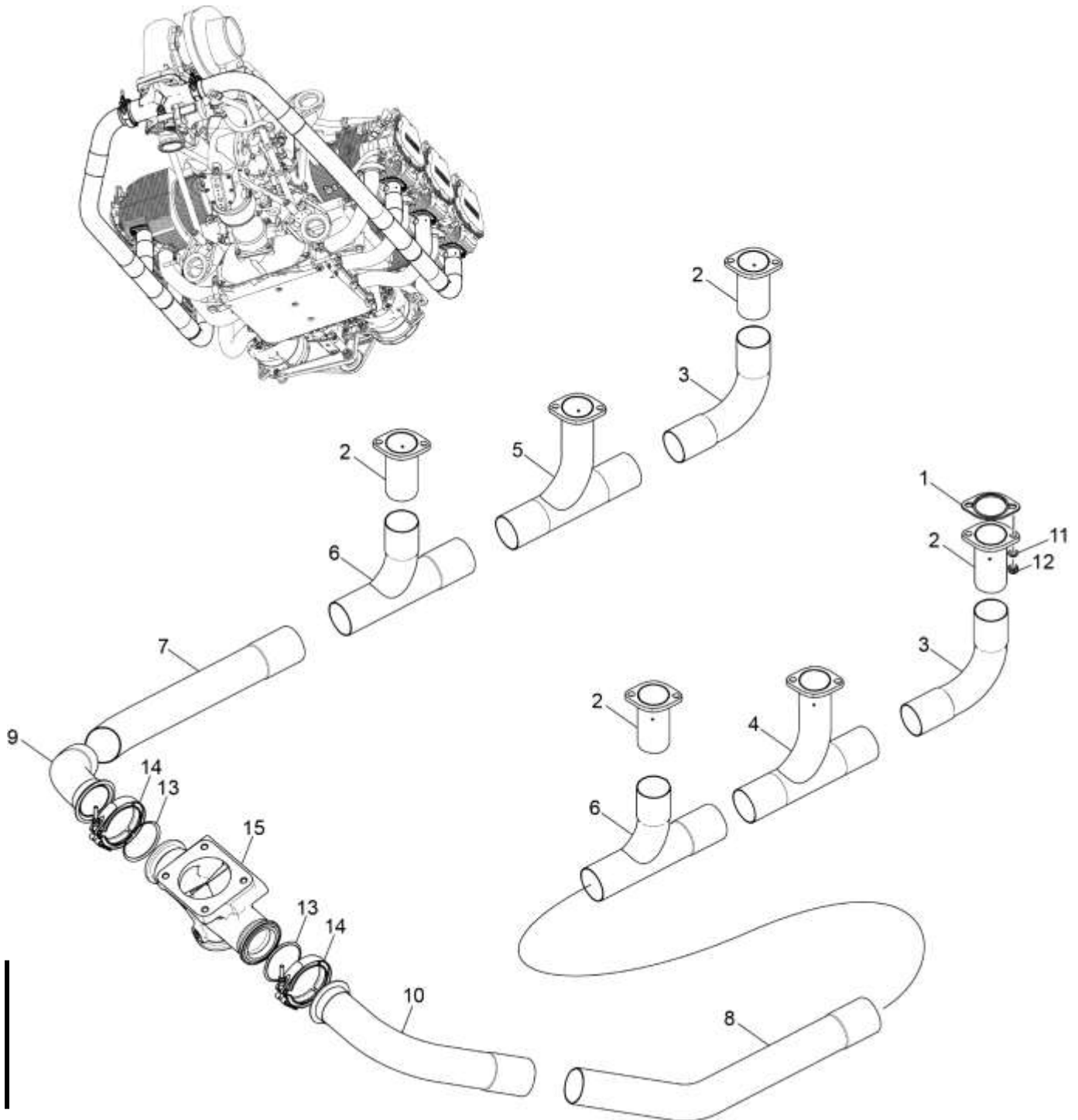
| Figure Item | Code | Part Number | Description | Units per Assembly |
|---|------|------------------|--|--------------------|
| 35 | | LW-16266-10-31 | CLAMP, 5/16 diameter for No. 10 screw | 2 |
| 36 | | 07A28335 | BRACKET, Wire harness, left hand | 1 |
| 37 | | STD-8 | WASHER, 1/4 plain | 2 |
| 38 | | STD-160 | WASHER, 1/4 lock, internal teeth | 2 |
| 39 | | STD-1411 | NUT, 1/4-20 plain | 2 |
| 40 | | LW-16266-10-25 | CLAMP, 1/4 I.D. for No. 10 screw, cushion | 1 |
| 41 | ** | LW-16266-10-38 | CLAMP, 3/8 dia. for No. 10 screw | 8 |
| 42 | * | LW-16266-10-1.25 | CLAMP, 1/4 I.D. for No. 10 screw, cushion | 4 |
| 43 | * | LW-16266-10-50 | CLAMP, 1/2 dia. for No. 10 screw | 2 |
| 44 | | LW-16266-10-63 | CLAMP, 5/8 I.D. for No. 10 screw | 6 |
| 45 | * | LW-16266-10-88 | CLAMP | 3 |
| 46 | | LW-16266-25-44 | CLAMP, 7/16 I.D. x 1/4 dia. screw | 1 |
| 47 | | LW-16266-25-50 | CLAMP | 1 |
| 48 | | LW-16266-25-75 | CLAMP, 3/4 I.D. x 1/4 dia. screw | 1 |
| 49 | | STD-670 | LOCK NUT, No. 10-32 | 6 |
| 50 | | STD-692 | SCREW, No. 10-32 x 1/2 long, round head | 6 |
| 51 | * | STD-670 | LOCK NUT, No. 10-32 | 5 |
| 52 | * | STD-860 | SCREW, NO. 10-32 x 5/8 long fill. head | 5 |
| 53 | | LW-16266-25-38 | CLAMP, 3/8 I.D. x 1/4 dia. screw | 1 |
| 54 | | LW-16266-10-1.25 | CLAMP, 1/4 I.D. for No. 10 screw, cushion | 1 |
| 55 | | LW-16266-10-50 | CLAMP, 1/2 dia. for No. 10 screw | 1 |
| 56 | | STD-860 | SCREW, NO. 10-32 x 5/8 long fill. head | 1 |
| 57 | | STD-670 | LOCK NUT, No. 10-32 | 1 |
| 58 | | LW-16266-10-75 | CLAMP, 3/4 dia. for No. 10 screw | 5 |
| 59 | | LW-16266-10-63 | CLAMP, 5/8 I.D. for No. 10 screw | 1 |
| 60 | | LW-16266-10-31 | CLAMP, 5/16 diameter for No. 10 screw | 2 |
| 61 | | STD-2079 | NUT, 1/4-20 UNC | 2 |
| | | 01B31661-251 | LOCKNUT-Prevailing torque, 1/4-20 UNC-2B, Thin | 2 |
| 62 | | STD-8 | WASHER, 1/4 plain | 2 |
| 63 | | STD-670 | LOCK NUT, No. 10-32 | 2 |
| 64 | | STD-243 | WASHER, No. 6 plain | 3 |
| 65 | | NAS1352-06-6 | SCREW, Socket head cap 6-32 x 3/8 long | 3 |
| 66 | | NAS1352-03-14 | SCREW, Socket head cap, 3-48 x 7/8 long | 6 |
| 67 | *** | 1182-Q4 | SPARK PLUG, URHB37E | 12 |
| <p>* Shipped loose with the engine ** Two of the clamps P/N LW-16266-10-38 are shipped loose with the engine. *** Refer to the latest revision of Service Instruction No. 1042 for approved spark plugs</p> | | | | |



130
Figure 32
Permanent Magnet Alternator

IGNITION DISTRIBUTION
Figure 32 – Permanent Magnet Alternator

| Figure Item | Code | Part Number | Description | Units per Assembly |
|--------------------|-------------|--------------------|----------------------------------|---------------------------|
| 1 | | 32T23324 | ALTERNATOR, Permanent magnet | 1 |
| 2 | | STD-1411 | NUT, 1/4-20 plain | 3 |
| 3 | | STD-160 | WASHER, 1/4 lock, internal teeth | 3 |
| 4 | | STD-8 | WASHER, 1/4 plain | 3 |
| 5 | | AS3209-151 | O-RING, 0.103 x 2.987 Viton | 1 |

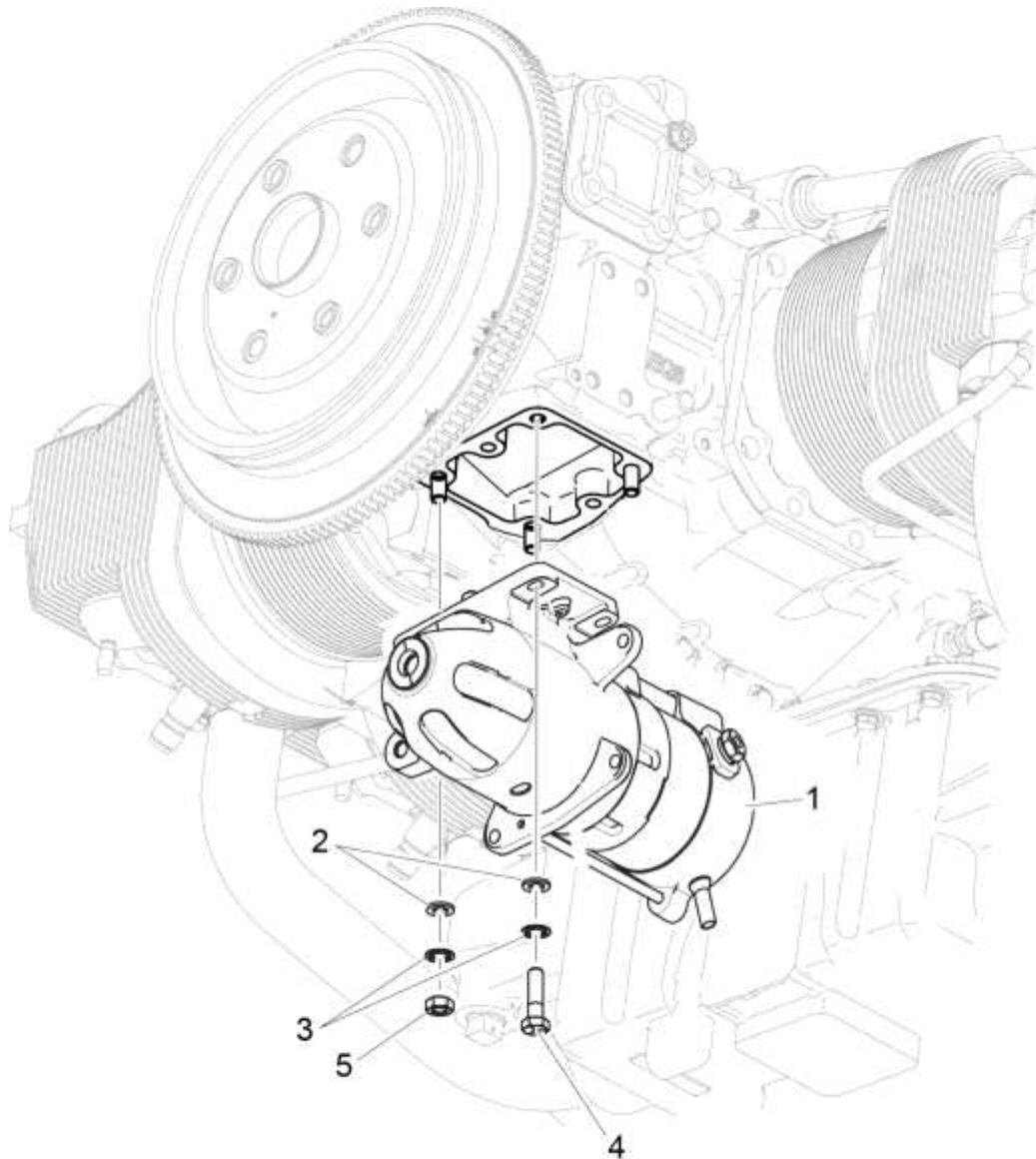


051BB
Figure 33
Exhaust Crossover Pipes and Transition Assembly

EXHAUST SYSTEM
Figure 33 - Exhaust Crossover Pipes and Transition Assembly

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|--|--------------------|
| 1 | | 77611 | GASKET, Exhaust flange | 6 |
| 2 | | 40G28371 | ADAPTER, Exhaust pipe, cylinders No. 1,2,5,6 | 4 |
| 3 | | 40B19844 | PIPE, Exhaust, cylinder No. 1 | 2 |
| 4 | | 40B28372 | PIPE, Exhaust, cylinder No. 3 | 1 |
| 5 | | 40B28373 | PIPE, Exhaust, cylinder No. 4 | 1 |
| 6 | | 40B26922 | PIPE, Exhaust, cylinders No. 5 and 6 | 2 |
| 7 | | 40B26923 | PIPE, Exhaust, rear intermediate left | 1 |
| 8 | | 40B26924 | PIPE, Exhaust, rear intermediate right | 1 |
| 9 | | LW-16790 | PIPE, Exhaust, left rear | 1 |
| 10 | | LW-16620 | PIPE, Exhaust, right | 1 |
| 11 | | AN960C516 | WASHER, 5/16 plain | 12 |
| 12 | | STD-2233 | LOCK NUT, 5/16-18 hex. head | 12 |
| 13 | | 78083 | GASKET, V-band coupling, 2.00 O.D. tube | 2 |
| 14 | | LW-12093-5 | COUPLING, V-band-2.00 O.D. tube | 2 |
| 15 | | LW-12437 | TRANSITION, Turbocharger | 1 |
| | | *47C29976 | TRANSITION, Turbocharger | 1 |

* Transition part number 47C29976 supersedes part number LW-12437



034BF
Figure 34
Starter Motor and Attaching Parts

CRANKING

Figure 34 - Starter Motor and Attaching Parts

| Figure Item | Code | Part Number | Description | Units per Assembly |
|-------------|------|-------------|--|--------------------|
| 1 | V | 31B26554 | STARTER, 24V., 12/14 pitch, 149NL/EC | 1 |
| 2 | | STD-35 | WASHER, 5/16 plain | 4 |
| 3 | | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 4 | | LW-31-1.16 | BOLT, 5/16-18 x 1-5/32 long, hex. head | 1 |
| 5 | | STD-1410 | NUT, 5/16-18 plain | 3 |

V Vendor Prime Manufacturer part

NOTICE: Refer to the latest revision of Service Instruction No. 1154 for complete listing of FAA approved starters.

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Service Kit Section

Seal and Gasket Set

| PART NO. | PART NAME | Qty. |
|-----------------|--|----------|
| 05K29134 | KIT - SEAL AND GASKET SET | 1 |
| LW-15628 | SEAL-CRANKSHAFT-OIL | 1 |
| 72091 | RING-OIL SEAL-.36ID X.10 DIA | 2 |
| 06E19769-1.25 | GASKET-ANNULAR-1.250 ID | 1 |
| 70455 | GASKET-.78 ID X 1.13 OD X .030 | 1 |
| 72053 | GASKET-GOVERNOR | 1 |
| 72378 | COVER-GOVERNOR DRIVE | 1 |
| 06B26276 | GASKET - ACCESSORY HOUSING | 1 |
| MS29512-10 | SEAL OIL-.097 SECTION X .706 I | 2 |
| 06A26277 | SEAL - FUEL PUMP .750 ID X 1.375 OD X .312 THK | 1 |
| MS29512-06 | O RING-.468 ID X .078 SECT.-. | 1 |
| MS28775-126 | O-RING - 1.362 NOM ID X .103 NOM WIDTH | 1 |
| MS29512-10 | SEAL OIL-.097 SECTION X .706 I | 1 |
| MS29512-10 | SEAL OIL-.097 SECTION X .706 I | 2 |
| 06A19956 | OIL SEAL-.875ID X 1.50 OD X.31 | 1 |
| 8313 | GASKET-VACUUM PUMP | 1 |
| 06A19956 | OIL SEAL-.875ID X 1.50 OD X.31 | 1 |
| 8313 | GASKET-VACUUM PUMP | 1 |
| 06B21326 | GASKET-OIL SUMP | 1 |
| 06E19769-0.91 | GASKET-ANNULAR-.906 ID | 1 |
| 72210 | GASKET-AIR THROTTLE HOUSING | 1 |
| 06E19769-1.00 | GASKET-ANNULAR-1.000 ID | 1 |
| 71481 | RING-OIL SEAL-.09 DIA X 4.84ID | 6 |
| LW-18661 | SEAL-SHROUD TUBE | 24 |
| 66732 | GASKET-VALVE ROCKER SHAFT COVR | 12 |
| 06B26811 | GASKET - ROCKER BOX COVER (SILICONE) | 6 |
| 72711 | RING-SEAL-INTAKE PIPES | 6 |
| 71973 | GASKET-2 BOLT FLANGE-1.81 ID | 6 |
| 69164 | GASKET-FUEL PUMP ADAPTER | 2 |
| 73032 | GASKET-AIR INLET HOUSING | 1 |
| 06E19769-0.50 | GASKET-ANNULAR-.500 ID | 6 |
| MS29513C-028 | O-RING - FUEL RESISTANT - 1.364 ID X .070 W | 1 |
| 77611 | GASKET-EXHAUST FLANGE | 6 |
| 78083 | GASKET-V BAND COUPLING-2.00 OD | 2 |
| 75845 | GASKET-V BAND COUPLING-2.25 | 1 |

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Seal and Gasket Set (Cont.)

| | | |
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| 05K29134 | KIT - SEAL AND GASKET SET (CONT.) | 1 |
| MS29512-06 | O RING-.468 ID X .078 SECT-. | 2 |
| MS29512-03 | O RING-.301 ID X .064 SECT-. | 1 |
| 77723 | GASKET-TURBOCHARGE BY-PASS | 1 |
| 73314 | GASKET-DENSITY & DIFFERENTIAL | 2 |
| 75371 | GASKET-TURBO OIL INLET ADAPTER | 1 |
| 78903 | GASKET-TURBO OIL DRAIN | 1 |
| MS29512-10 | SEAL OIL-.097 SECTION X .706 I | 1 |
| MS29512-06 | O RING-.468 ID X .078 SECT-. | 1 |
| MS28775-018 | O-RING | 1 |
| MS28775-021 | O-RING | 1 |
| 70457 | GASKET-OIL FILLER EXTENSION | 1 |
| 74065 | RING-OIL LEVEL GAGE SEAL | 1 |
| MS28775-015 | O RING-.551 ID X .07 DIA | 1 |
| 06A23493 | SEAL, Shroud tube | 8 |

Single Cylinder Seal and Gasket Set

| | | |
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| 05K31587 | KIT - SEAL & GASKET FOR 1 CYL | 1 |
| 06C29879-CT | O-RING - FUEL INJECTOR, UPPER | 1 |
| 06C29878-CT | O-RING - FUEL INJECTOR, LOWER | 1 |
| 06C29094-CT | KIT - O-RING - FUEL INJECTOR | 1 |
| 06E19769-0.50 | GASKET-ANNULAR-.500 ID | 1 |
| STD-475 | WASHER-.3125 LOCK-INT. TEETH | 1 |
| STD-160 | WASHER-.250 LOCK INT.TEETH | 9 |
| 66732 | GASKET-VALVE ROCKER SHAFT COVR | 2 |
| 06B26811 | GASKET - ROCKER BOX COVER (SILICONE) | 1 |
| 71481 | RING-OIL SEAL-.09 DIA X 4.84ID | 1 |
| 72711 | RING-SEAL-INTAKE PIPES | 1 |
| STD-2233 | LOCKNUT-.3125-18 HEX | 2 |
| 77611 | GASKET-EXHAUST FLANGE | 1 |
| LW-18661 | SEAL-SHROUD TUBE | 4 |
| STD-2180 | HOSE-.38 ID X 1.88 LONG | 2 |

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| PART NO. | PART NAME | Qty. |
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| 05K26774 | KIT - CYLINDER, PISTON AND RING ASSEMBLY | 1 |
| 14D23907 | PISTON - COMPRESSION RATIO 7.30:1 | 1 |
| 74241 | RING-PISTON-COMP-5.125 BORE | 2 |
| 14H29889 | RING-PISTON-OIL-5.125 BORE | 1 |
| LW-14078 | PIN-PISTON | 1 |
| 72198 | PLUG-PISTON PIN | 2 |
| 66732 | GASKET-VALVE ROCKER SHAFT COVR | 2 |
| 06B26811 | GASKET - ROCKER BOX COVER (SILICONE) | 1 |
| LW-18661 | SEAL-SHROUD TUBE | 4 |
| 71481 | RING-OIL SEAL-.09 DIA X 4.84ID | 1 |
| SSP-299 | TAG: USE OF PISTON PIN PLUGS | 1 |
| 71195 | CONTAINER | 1 |
| 77611 | GASKET-EXHAUST FLANGE | 1 |
| 71973 | GASKET-2 BOLT FLANGE-1.81 ID | 1 |
| AV951391 | PACKING, PRE-FORMED | 2 |
| 16G26682-01 | CYLINDER HEAD AND VALVE ASSY | 1 |
| 16A30200-0101 | CYLINDER HEAD AND VALVE ASSY, Nitrided (Approved alternate for P/N 16G26682-01) | 1 |
| 06A23493 | SEAL-SHROUD TUBE | 2 |
| 1102 | PLUG-.125 PIPE | 2 |
| 06E19769-0.50 | GASKET-ANNULAR-.500 ID | 1 |
| SSP-115 | STICKER | 1 |

Piston Ring Kit

| PART NO. | PART NAME | Qty. |
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| 05K22037 | KIT - PISTON RING | 1 |
| 74241 | RING-PISTON-COMP-5.125 BORE | 2 |
| 14H29889 | RING, PISTON, OIL REGULATING, EXPANDER TYPE | 1 |

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| 01B31661-251 | LOCKNUT | 69 | 06E19769-0.91 | GASKET | 41 |
| 01C26131 | BOLT | 11 | 06E19769-1.00 | GASKET | 27 |
| 01L21418 | WASHER | 5 | 06E19769-1.25 | GASKET | 9 |
| 01L26373 | SPACER | 68 | 07A21156 | BRACKET | 1 |
| 01L26374 | SPACER | 68 | 07A26130 | BRACKET | 1 |
| 01L26665 | SPACER | 11 | 07A28331 | BRACKET | 61 |
| 01L29970 | WASHER | 65 | 07A28334 | BRACKET | 68 |
| 01M29868 | FIRE SLEEVE | 55 | 07A28335 | BRACKET | 69 |
| 01M29869 | FIRE SLEEVE | 55 | 07A28507 | BRACKET ASSY | 56 |
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| 02A19417-CT | ELBOW | 61 | 07C26344-CT | CLAMP | 37 |
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| 02E26641 | ADAPTER | 59 | 07F21160 | STRUT | 1 |
| 02E29797 | ADAPTER | 19 | 07F28508 | LINK | 1 |
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| MS29512-06 | O-RING | 35 | STD-35 | WASHER | 5 |
| MS29512-06 | O-RING | 43 | STD-35 | WASHER | 15 |
| MS29512-10 | SEAL | 31 | STD-35 | WASHER | 19 |
| MS29512-10 | SEAL | 43 | STD-35 | WASHER | 37 |
| MS29512-10 | SEAL | 53 | STD-35 | WASHER | 45 |
| MS29513-028 | O-RING | 59 | STD-35 | WASHER | 47 |
| MS34589-22X | GROMMET | 25 | STD-35 | WASHER | 75 |
| NAS1149E0332P | WASHER | 59 | STD-68 | PIN | 29 |
| NAS1352-03-14 | SCREW | 68 | STD-68 | PIN | 29 |
| NAS1352-03-14 | SCREW | 69 | STD-91 | PLUG | 41 |
| NAS1352-06-6 | SCREW | 68 | STD-110 | SCREW | 35 |
| NAS1352-06-6 | SCREW | 69 | STD-148 | NIPPLE | 59 |
| NAS1352-08-8 | SCREW | 68 | STD-160 | WASHER | 15 |
| NAS1352C3H10 | SCREW | 59 | STD-160 | WASHER | 25 |
| NAS1352C3H20 | SCREW | 35 | STD-160 | WASHER | 27 |
| NAS1352C4H10 | SCREW | 11 | STD-160 | WASHER | 29 |
| NAS1352C4H10 | SCREW | 61 | STD-160 | WASHER | 41 |
| NASM24693-S95 | SCREW | 68 | STD-160 | WASHER | 45 |
| STD-8 | WASHER | 11 | STD-160 | WASHER | 49 |
| STD-8 | WASHER | 15 | STD-160 | WASHER | 51 |
| STD-8 | WASHER | 27 | STD-160 | WASHER | 55 |
| STD-8 | WASHER | 29 | STD-160 | WASHER | 68 |
| STD-8 | WASHER | 32 | STD-160 | WASHER | 69 |
| STD-8 | WASHER | 41 | STD-160 | WASHER | 71 |
| STD-8 | WASHER | 45 | STD-243 | WASHER | 68 |
| STD-8 | WASHER | 49 | STD-243 | WASHER | 69 |
| STD-8 | WASHER | 51 | STD-249 | WASHER | 68 |
| STD-8 | WASHER | 55 | STD-250 | WASHER | 68 |
| STD-8 | WASHER | 61 | STD-251 | WASHER | 35 |
| STD-8 | WASHER | 68 | STD-375 | SCREW | 35 |
| STD-8 | WASHER | 69 | STD-420 | NUT | 35 |
| STD-8 | WASHER | 71 | STD-425 | WASHER | 35 |
| STD-28 | WASHER | 35 | STD-425 | WASHER | 56 |

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| STD-425 | WASHER | 61 | STD-1164 | INSERT | 27 |
| STD-475 | WASHER | 1 | STD-1173 | INSERT | 43 |
| STD-475 | WASHER | 5 | STD-1211 | PLUG | 11 |
| STD-475 | WASHER | 15 | STD-1339 | PLUG | 7 |
| STD-475 | WASHER | 19 | STD-1342 | WASHER | 1 |
| STD-475 | WASHER | 37 | STD-1354 | WASHER | 1 |
| STD-475 | WASHER | 47 | STD-1410 | NUT | 5 |
| STD-475 | WASHER | 75 | STD-1410 | NUT | 47 |
| STD-551 | PLUG | 41 | STD-1410 | NUT | 75 |
| STD-596 | NUT | 15 | STD-1411 | NUT | 15 |
| STD-596 | NUT | 39 | STD-1411 | NUT | 25 |
| STD-632 | WASHER | 1 | STD-1411 | NUT | 41 |
| STD-670 | LOCK NUT | 25 | STD-1411 | NUT | 49 |
| STD-670 | LOCK NUT | 31 | STD-1411 | NUT | 51 |
| STD-670 | LOCK NUT | 55 | STD-1411 | NUT | 68 |
| STD-670 | LOCK NUT | 56 | STD-1411 | NUT | 69 |
| STD-670 | LOCK NUT | 61 | STD-1411 | NUT | 71 |
| STD-670 | LOCK NUT | 68 | STD-1420 | NUT | 29 |
| STD-670 | LOCK NUT | 69 | STD-1420 | NUT | 45 |
| STD-678 | WASHER | 15 | STD-1501 | SCREW | 35 |
| STD-678 | WASHER | 31 | STD-1727 | WASHER | 37 |
| STD-678 | WASHER | 35 | STD-1864 | NUT | 29 |
| STD-678 | WASHER | 39 | STD-1925 | SCREW | 25 |
| STD-684 | NIPPLE | 25 | STD-1932 | BUSHING | 31 |
| STD-692 | SCREW | 25 | STD-2078 | DOWEL | 11 |
| STD-692 | SCREW | 56 | STD-2079 | NUT | 68 |
| STD-692 | SCREW | 61 | STD-2079 | NUT | 69 |
| STD-692 | SCREW | 69 | STD-2090 | NUT | 25 |
| STD-713 | PIN | 1 | STD-2145 | BOLT | 29 |
| STD-784 | PLUG | 41 | STD-2180 | HOSE | 25 |
| STD-860 | SCREW | 31 | STD-2197 | WASHER | 29 |
| STD-860 | SCREW | 55 | STD-2205 | WASHER | 29 |
| STD-860 | SCREW | 56 | STD-2231 | RING | 11 |
| STD-860 | SCREW | 56 | STD-2233 | LOCK NUT | 73 |
| STD-860 | SCREW | 68 | STD-2249 | NUT | 15 |
| STD-860 | SCREW | 69 | STD-2254 | MOUNT | 68 |
| STD-872 | NUT | 15 | | | |